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**Cultural Differences in Children's Development of Social Competence  
between European American and Chinese Immigrant Families**

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**Cultural Differences in Children's Development of Social Competence  
between European American and Chinese Immigrant Families**

by

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**Dissertation**

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

**Doctor of Philosophy**

The University of Texas at Austin

December 2009

## **Dedication**

*This dissertation is dedicated to my parents*

## **Acknowledgements**

This dissertation would not have been completed without the help and emotional support of the great people around me. I would like to take this opportunity to express my deepest appreciation to these wonderful people: my committee members and supervisors, the participants of this study, my family, and my dear friends.

I would first like to express my appreciation to my committee members, Dr. Edmund Emmer, Dr. Toni Falbo, and Dr. Su Yeong Kim, for contributing their expertise and time to my dissertation study. With their comments and suggestions, the quality of my study has been much improved. I must also thank my supervisors, Dr. Marie-Anne Suizzo and Dr. Tiffany Whittaker, for the immeasurable amount of support, guidance, and time they have given on my study. I would like to thank them for their patience, understanding, encouragement, and their belief in me and my abilities. They are not only my dissertation supervisors, but also very close friends of mine. It is a privilege to be able to work with them and receive their guidance throughout my study at the University of Texas at Austin.

I would also like to express my gratitude to all the Chinese immigrant mothers in this study for their willingness to spare time from their busy schedules and share their experiences, thoughts, and stories with me. It was a pleasure to talk with them and learn about their life stories. Also, I would like to thank my friend, Teresa Lai, and the

principals of the two Chinese schools in which I conducted my study for their kind help and support in the data collection process.

Finally, I would like to thank my family, my parents and brothers, for giving me unconditional love, encouragement, and advice throughout the dissertation process. I always feel recharged after talking with them. I would also like to thank my wonderful friends, Shih-Ting Lee, Wei-Ting Chen, Margaret Kuon, Kok-Yung Soon, and Yu-Jung Chen, for their friendship and help over the years.

# **Cultural Differences in Children's Development of Social Competence between European American and Chinese Immigrant Families**

Publication No. \_\_\_\_\_

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The University of Texas at Austin, 2009

Supervisors: Marie-Anne Suizzo

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The purpose of this study was to investigate the developmental outcomes of Chinese American children's social competence in their transition to elementary school. In this study, I used a mixed-methods research design. The first part of the study was a secondary analysis of data from the Early Childhood Longitudinal Study-Kindergarten Cohort. I examined cultural differences in the effects of parental warmth, parental SES, parent-child communication, and children's participation in peer-oriented structured extracurricular activities on the social development of European American and Chinese American children. For the second part of the study, I developed questions based on the findings of the quantitative analysis and conducted interviews to further explore how Chinese immigrant mothers' parenting beliefs and practices contributed to their children's development of social competence.

The results showed that in Chinese immigrant families, parental SES influenced parent-child communication, which in turn promoted children's social competence. Parental SES, but not parental warmth, predicted their children's participation in peer-oriented structured extracurricular activities. Years of stay in the U.S. positively predicted children's participation in peer-oriented structured extracurricular activities, while it negatively predicted parent-child communication in Chinese immigrant families. The qualitative data suggested that Chinese immigrant mothers facilitated their children's social development by giving them verbal guidance for peer problems, encouraging conversations at home, and serving as role models for their children. Children's activity participation was restricted by the affordability of activities and parents' ability to provide transportation for their children. The Chinese immigrant mothers perceived taking on daily responsibilities and spending quality time together with their children as ways to express love toward them. These mothers' childrearing practices were influenced by the generational gap and acculturation.

This study broadens our understanding of Chinese American children's development of social competence in their transition to formal schooling. It contributes new knowledge about 1) cultural differences in the effects of parental warmth and SES on parent-child communication; 2) the influences of parental SES on parent-child communication and Chinese American children's participation in peer-oriented structured extracurricular activities; and 3) the effect of years of stay in the U.S. on parent-child communication in Chinese immigrant families.



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## CHAPTER ONE

### INTRODUCTION

The transition to elementary schooling is an important developmental period for children (Entwisle & Alexander, 1989; Perry & Weinstein, 1998). When children enter a formal school setting, they are required to interact with different individuals and play multiple roles outside of their homes (Flannagan, 1996; Votruba-Drzal, 2006). They also need to achieve academic success and use their acquired social skills to develop or maintain friendships (Bronson, 2000; Entwisle & Alexander, 1989; Flannagan, 1996). Since early experiences in formal schooling may significantly influence children's school adjustment and subsequent academic performance, it is crucial to help children prepare before they enter this transition period.

Early middle childhood, or the "juvenile era" as Sullivan (1953) termed it, is "the actual time for becoming social" (p.227). This period includes children between 5 to 7 years of age who start to receive formal education. During early middle childhood, children's social world starts to expand and they spend an increasing amount of time interacting with peers and adults (Collins, 1984; Eccles, 1999). At the same time, they also encounter dramatic changes in their physical, cognitive, social, and emotional development (Votruba-Drzal, 2006). These rapid changes may be challenging for children, and thus influence their school performance and development. School adjustment therefore becomes an important task for children when they enter elementary school.

One important indicator of successful adaptation to schooling is children's acquisition and mastery of social skills (Missall & Hojnoski, 2008; Perry & Weinstein,

1998). Studies have shown that children who are more competent in learning-related and peer-related social skills have better school adjustment and higher academic performance (Ladd, Birch, & Buhs, 1999; McClelland, Morrison, & Holmes, 2000; McConnell, Strain, Kerr, Stagg, Lenkner, & Lambert, 1984; Walker & Hops, 1976). In order to help kindergarteners be ready for elementary school, it is essential to foster their development of social competence.

Family has been recognized as the major context of children's socialization (Kerns, Aspelmeier, Gentzler, & Grabill, 2001; Parke & Buriel, 2006). Parents serve as children's primary socialization agents in the family and play a critical role in children's social development (Fitzpatrick & Caughlin, 2002; Missall & Hojnoski, 2008; Rubin & Mills, 1992), as they usually understand their children and interact with them better than any other people (Messick, 1983). Rubin, Bukowski and Parker (1998) argued that parents' beliefs and perceptions about children's social development may influence their social behavior and peer relationships (Rubin, Bukowski, & Parker, 1998; Super & Harkness, 1986). Specifically, the values and socialization goals parents hold are usually expressed in terms of their childrearing practices and the home environment they provide to shape their children's experiences in learning social relationships and skills (Darling & Steinberg, 1993; Laosa & Sigel, 1982).

Parke and his colleagues (1988, 1992, 1994) suggest that family influences children's social relations through two alternative pathways: indirect and direct. Favorable parental socioeconomic status (SES) and parental warmth in the family usually provide an advantageous home environment which may indirectly promote children's

social competence (Bornstein & Bradley, 2003; Conger & Dogan, 2007; Parke, Cassidy, Burks, Carson, & Boyum, 1992). On the other hand, parents may also directly influence the development of social competence through giving advice or “managing” children’s access to peers (Ladd, Le Sieur, & Profilet, 1993; Ladd, Profilet, & Hart, 1992; Laible, 2004; Mize & Pettit, 1997).

Research has indicated that parental SES is positively associated with parental socialization (Parke, 2004) and with better developmental outcomes for children (Bradley & Corwyn, 2002). Compared with lower-SES parents, higher-SES parents usually possess greater resources and tend to increase their investment in their children’s social development (Bradley & Corwyn, 2002; Mayer, 1997). Moreover, parents with higher SES are less likely to suffer from emotional distress caused by financial hardship, which may impair parenting practices and their relationships with children (Conger & Conger, 2002).

Parental warmth also plays an important role in children’s social development and school adjustment (Barth & Parke, 1993; Cowan, Cowan, Schulz, & Heming, 1994; Missall & Hojnoski, 2008). Warm and close parent-child relationships foster children’s identification with their parents and increase their willingness to internalize and comply with their parents’ values and standards (Darling & Steinberg, 1993; Hoffman, 1970, 1983; Maccoby, 1984; MacDonald, 1992). Parents who have warm relationships with their children are able to provide their children with positive experiences in their social interactions, which in turn influence children’s understanding of and behaviors in future interpersonal relationships (Parke & Buriel, 1998; McHale, Dariotis, & Kauh, 2003).

Moreover, middle childhood is an important time for parents to promote parent-child communication in the family (Gentzler, Contreras-Grau, Kerns, & Weimer, 2005). Since children at this age have more opportunities to interact with individuals outside of the home, parents may not be able to know what happened to their children unless their children want to disclose to them (Gentzler et al., 2005). Through daily communications, parents help children deal with interpersonal problems and prepare for later social interactions (Ladd et al., 1993).

Parents may also facilitate their children's social development by enrolling them in peer-oriented structured extracurricular activities such as sports teams and organized clubs. Peer-oriented structured extracurricular activities, characterized by the careful supervision of adults and specific developmental and group goals, provide abundant opportunities for children to interact with other children and develop social skills (Mahoney, Larson, Eccles, & Lord, 2005; Ripke, Huston, & Casey, 2006). Through participation in such activities, children gain skills in working with peers, achieving self-discipline, and coping with failures (Duda & Ntoumanis, 2005).

Cultural contexts, in addition to family, are influential in children's development of social behavior and peer relationships (Hinde, 1987). Cultural characteristics are typically observed in everyday parenting practices and behavioral routines (Goodnow, Miller, & Kessel, 1995). As stated earlier, parents' childrearing practices and beliefs about development play an essential role in children's social outcomes (Rubin et al., 1998). The cultural values parents hold guide the ways they raise and socialize their children, and in turn influence their children's development (McGillicuddy-De Lisi, 1985; Super &

Harkness, 1986). Therefore, a thorough understanding of the cultural backgrounds of families becomes critical when investigating children's social development.

There has been abundant research focusing on parenting styles across ethnic groups. European American mothers have been found to be more likely to apply firm parental control, warmth, and facilitative approaches to promote children's learning and development (Baumrind, 1971, Chao, 1995). For example, they are usually aware of children's special interests and individual differences and show unconditional love in their parenting practices (Baumrind, 1966; Chao, 1995). On the other hand, Chinese parents are usually found to be more directive and less responsive when interacting with their children (Chiu, 1987). Nonetheless, other researchers have suggested that the characteristic of Chinese parenting, *guan*, is equivalent to a supportive and authoritative parenting style (Chao, 1994). According to Tobin, Wu, and Davidson (1989), *guan* literally means "to care for" or "to govern," and includes elements of firm control, involvement, and parental concern. Another similar idea of "training," which means "teaching" or "educating," is also commonly observed in Chinese families (Chao, 1994; Wu, 1985). Through the process of training, parents help their children learn socially and culturally desirable behaviors, and to perform well in school (Wu & Tseng, 1985).

Chinese immigrant mothers in the United States are generally raised and socialized in Chinese culture. However, they usually experience a process of learning the culture of the host country while choosing to retain the values or behaviors of their culture of origin (Coll, Meyer, & Brillon, 1995; Zane & Mak, 2003). Through this process, parents develop their new belief systems and socialize their children accordingly.

In order to understand the social development of Chinese American children, it is necessary to investigate the cultural beliefs and attitudes of Chinese immigrant mothers.

Although existing literature has shown that parental SES, warmth, parent-child communication, and peer-oriented structured extracurricular activities contribute to children's social development, these factors have not been examined in an integrative and systematic way. Moreover, previous studies on Chinese American children have paid much attention to the effects of Chinese parenting on their excellent academic performance (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). However, research on the social development of Chinese American children in early middle childhood is still lacking. It is necessary to further investigate children's development of social competence in Chinese immigrant families.

The purpose of this study is to understand the developmental outcomes of children's social competence in their transition to elementary school. Specifically, I aim to investigate how parental warmth, parent-child communication, parental SES, and children's engagement in peer-oriented structured extracurricular activities influence social development, and whether these effects differ between Chinese immigrant and European American families. Another aim of this study is to understand Chinese American children's social development and how the cultural features in Chinese immigrant families lead to the differences between the two ethnic groups.

## CHAPTER TWO

### LITERATURE REVIEW

This chapter reviews theories and research on the social development of children during early middle childhood. Since social competence serves as the key variable in the study, this chapter will start with a brief description of social competence. I will discuss the theories of socialization from different perspectives in order to understand the theoretical background of children's social development. Moreover, parenting factors relating to the development of children's social competence will be discussed. Specifically, the chapter will address definitions of parental warmth, parent-child communication, and peer-oriented structured extracurricular activities, as well as their influences on children's social development. I will explore the effects of parental SES and culture on each parenting factor noted above so as to explain the development of social competence in European American and Chinese American children. The chapter will end with the presentation of the conceptual model for this study.

#### Social Competence

Social competence has been defined from diverse perspectives. Researchers have measured social competence by means of their evaluations of the "effectiveness" of children's social functioning (Howes, 1987; Rose-Krasnor, 1997; Waters & Sroufe, 1983). Other researchers define social competence as the capacity to attain certain social goals or positive outcomes (Ford, 1982; Duck, 1989; Meisels, Atkins-Burnett, & Nicholson, 1996; Taylor & Asher, 1984). For example, Meisels et al. (1996) proposed that social competence involves the "skills and behaviors of a child that lead to positive social

outcomes with the individuals residing in a given setting and that avoid socially unacceptable responses” (p.4). Some researchers take a developmental perspective in understanding the meaning of social competence (Elicker, Englund, & Sroufe, 1992; Rubin & Rose-Krasnor, 1992). Rubin and Rose-Krasnor (1992) stated that social competence indicates “the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across settings (p.285).” Other researchers suggested that social competence should be understood via the assessment of a set of desirable social skills (Anderson & Messick, 1974). Anderson and Messick (1974) reported a comprehensive list of 29 indicators to measure different aspects of social competence (e.g., social, emotional, cognitive, and perceptual-motor attributes). Using a checklist of positive social behaviors makes it easier to operationalize and measure social competence (Rose-Krasnor, 1997). In this study, I adopt Anderson and Messick’s (1974) point of view that social competence is better understood in terms of desirable social skills.

Previous studies have suggested that social skills which are related to learning and peer interactions are critical for children’s school adjustment (Ladd et al., 1999; McClelland et al., 2000; McConnell et al., 1984; Missall & Hojnoski, 2008). Children who display positive peer-related social behaviors during the first few weeks of school are usually found to be accepted by peers and have more friends (Ladd et al., 1999). Moreover, children’s learning-related social skills have been proven to predict their academic performance in school (McConnell et al., 2000). Most of the existing empirical studies, however, have focused on preschool children’s social competence during their



transition to kindergarten. There is still a lack of research on kindergarteners' transition to the first grade. In this study, I aim to understand children's social development in this specific transitional period.

In this study, three learning-related and/or peer-related social skills are used as variables to investigate children's social development during their transition to elementary school: *approaches to learning*, *self-control*, and *social interactions*.

### *Approaches to Learning*

Learning-related social skills are important for schoolchildren's learning. These skills include behaviors such as concentration, intellectual curiosity, persistence, responsibility, and eagerness to learn (NCES, 2004). These skills are associated with positive classroom behavior, which may influence children's later social behavior and academic performance (McClelland et al., 2000).

Children who have better learning-related social skills are more capable of accomplishing learning tasks and developing skills (Missall & Hojnoski, 2008). Harter (1981) stated that children who are curious, enjoy learning processes, and like to discover things independently are more likely to feel confident about their cognitive abilities and have greater academic performance. Moreover, McClelland et al. (2000) reported that learning-related social skills have a long-term effect on children's academic school adjustment. Specifically, kindergarten children who had advanced learning-related skills showed better academic performance (e.g., reading, mathematics, and vocabulary). This academic advantage continued to be influential through the second grade.

### *Self-Control*

Self-control is usually defined as a child's ability to react appropriately in both conflict (e.g., teasing) and nonconflict (e.g., compromising) situations (Gresham & Elliot, 1990). Self-control involves positive social behaviors such as respecting others, controlling his or her temper, resisting temptation, accepting other children's ideas during group activities, and delayed gratification (Mischel & Mischel, 1983; NCES, 2004). Kopp (1982) argued that self-control is a "pre-matured" form of self-regulation, for it is more behaviorally related and has less flexibility in response to changes in situational demands. Other researchers, however, suggested that self-control and self-regulation can be used interchangeably (e.g., Mischel & Mischel, 1983; Mischel, Shoda, & Rodriguez, 1989). Compared with younger children, elementary school children have greater cognitive capacity and are more able to regulate their behaviors and emotions (Bronson, 2000). Garber, Braafladt, and Zeman (1991) noted that children at this stage are more able to understand the causes of emotional arousals and the necessity of regulating their own emotions in social settings.

Studies have suggested that children's capacities for regulation and constructive coping are associated with prosocial behavior in school (Eisenberg, Fabes, Murphy, Maszk, Smith, & Karbon, 1995). Children who have the ability to regulate their emotions as well as emotion-related behaviors showed more socially appropriate behaviors at school (Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, Friedan, Poulin, & Maszk, 1997). With the skill of self-control, children are able to maintain good relationships with others and behave in a socially desirable way.

### *Social Interactions*

Social interaction refers to active and reciprocal exchanges of information between two individuals (Garton, 1991). Social interaction is considered an important tool in connecting individuals' inner lives and their social world (Holstein & Cubrium, 2003). Through interactions with peers and adults, children learn to take the perspectives of others and model other individuals' desirable behaviors (Bronson, 2000). The acquisition of good social interaction skills enables children to make friends and maintain friendships, join in play easily, and exhibit positive social behavior such as helping peers (NCES, 2004).

The ability to establish positive relationships with peers is essential for children's social development (Newcomb & Bagwell, 1996). In a longitudinal study of children's friendships and peer acceptance, Lindsey (2002) discovered that, compared with children who had fewer or no mutual friends, children with more mutual friends were better accepted by peers and were regarded as more socially competent by teachers. Children with no mutual friends were also usually found to be less socially skilled when interacting with peers, and tended to have difficulties in entering play groups (Howes, Rubin, Ross, & French, 1988). In addition, Howes et al. (1988) reported that children who maintained intimate friendships across time were rated to be more socially competent than children who did not keep friendships.

### *Socialization Theories*

Parents have long been regarded as the primary agents for children's socialization (Fitzpatrick & Caughlin, 2002). According to Maccoby (2007), socialization is "the

processes whereby naïve individuals are taught the skills, behavior patterns, values, and motivations needed for competent functioning in the culture in which the child is growing up” (p.13). Through socialization processes, children become more competent in their social skills, which are indispensable for successful school adjustment and social interactions (Ladd et al., 1999; McClelland et al., 2000; McConnell et al., 1984). In this section, three socialization theories are discussed to explain children’s development of social skills during early middle childhood.

### *Bandura’s Social Learning Theory*

According to Bandura (1977), individuals learn how to behave in the social context by observing the outcomes of others’ behaviors as well as of the consequences of their own behaviors. On a daily basis, individuals have abundant opportunities to gain experiences in understanding which kinds of behaviors will be rewarded, ignored, or punished. At the same time, they also learn behavioral outcomes from other people’s mistakes and successes. Through the process of behavioral evaluations, individuals acquire knowledge of outcome expectancy, and establish personal standards for behavior (Bandura, 1977). Gradually, individuals’ behaviors become regulated by their internal standards rather than by external punishments and rewards (Bandura, 1986). Moreover, Bandura indicated that modeling more knowledgeable and competent individuals is more efficient in children’s organization of behavioral responses than evaluating the rewards and punishments of behaviors. For school-aged children, this socialization process may be observed in parent-child interactions as well as in social interactions such as peer-oriented structured extracurricular activities with peers outside of the home.

### *Vygotsky's Perspective*

Like Bandura, Vygotsky placed a great emphasis on social interactions as a context for children's socialization. Vygotsky investigated human development and how interpersonal communication and culture guide children's developmental processes. He believed that learning and development are closely intertwined, and that children's knowledge is constructed through the process of social interactions. Vygotsky (1978, 1987) argued that children develop higher mental functioning by interacting with significant others in everyday life within a particular cultural group. With the assistance of more skilled peers or adults, children's cognitive functioning develops through participation in activities which are slightly beyond their present ability in their "zone of proximal development" (Vygotsky, 1978; Wertsch, 1979).

Language, as suggested by Vygotsky (1978), is critical for children's social-cognitive development. Language is usually used as a communication tool for conversation between children and adults. In the context of the family, parent-child conversations and interactions can be internalized by children, so their thoughts eventually become social (Vygotsky, 1978). Therefore, parents' conversations with children about social issues may foster the development of children's understandings about social relationships and their development of social competence.

### *Rogoff's Perspective*

Rogoff (1990) extended Vygotsky's (1978) concept of the zone of proximal development and emphasized the importance of social interactions in human development. In contrast to several other development theories suggesting that

individuals are passive recipients of knowledge, Rogoff and her colleagues (1995) believed that individuals' development occurs through active participation in sociocultural activities. From Rogoff's perspective, it is essential to understand how individuals' participation in activities, which are formed by the individuals and other people in cultural communities, promotes human development (Rogoff, 1997).

According to Rogoff et al. (1995), individuals' developmental processes should be understood and analyzed in terms of three inseparable processes: *personal*, *interpersonal*, and *community*. The *personal process* focuses on how individuals change their understandings about and their responsibilities in social activities through their involvement in those activities, which helps them prepare for subsequent related social situations. The *interpersonal process* relates to how individuals communicate and cooperate in joint participation and interpersonal interactions. The *community process* highlights individuals' participation with others in culturally organized activities (Rogoff, 1997; Rogoff et al., 1995).

Rogoff (1990) suggested the idea of guided participation, in which "caregivers and children collaborate in arrangements and interactions that support children in learning to manage the skills and values of mature members of their society" (p.65). These arrangements and adjustments of children's participation in activities foster the extension of children's existing knowledge and skills so they can deal with new cultural activities in the future. With routine guided participation in ongoing cultural activities, children rapidly acquire the ability to become skilled participants in society (Rogoff, 1990; 1993).

Various studies on children's social development have supported the socialization theories discussed above (e.g., Gresham & Elliott, 1993; Laible & Thompson, 2000, 2002). Gresham and Elliott (1993) stated that social skills are "primarily acquired through learning that involves observation, modeling, rehearsal, and feedback" (p.141). Children are likely to be socially impaired if they do not have the knowledge of or the opportunities to learn and practice prosocial behaviors (Elliott & Gresham, 1991). The same consequence may occur if children do not have sufficient practice or receive reinforcement and feedback on socially skilled behaviors (Elliott & Gresham, 1991). Vygotsky's (1978) ideas of the "zone of proximal development" and language, which is usually expressed through conversations in the family, also theoretically grounds the importance of parent-child communication on children's development of social competence. Moreover, Rogoff et al. (1995) suggested that well-organized social activities play an important role in children's development. Children are able to make use of the abundant opportunities and social contexts provided by peer-oriented structured extracurricular activities to interact with peers and develop social skills (Mahoney et al., 2005). In sum, these theories are helpful in understanding the multiple pathways in which children develop their social competence.

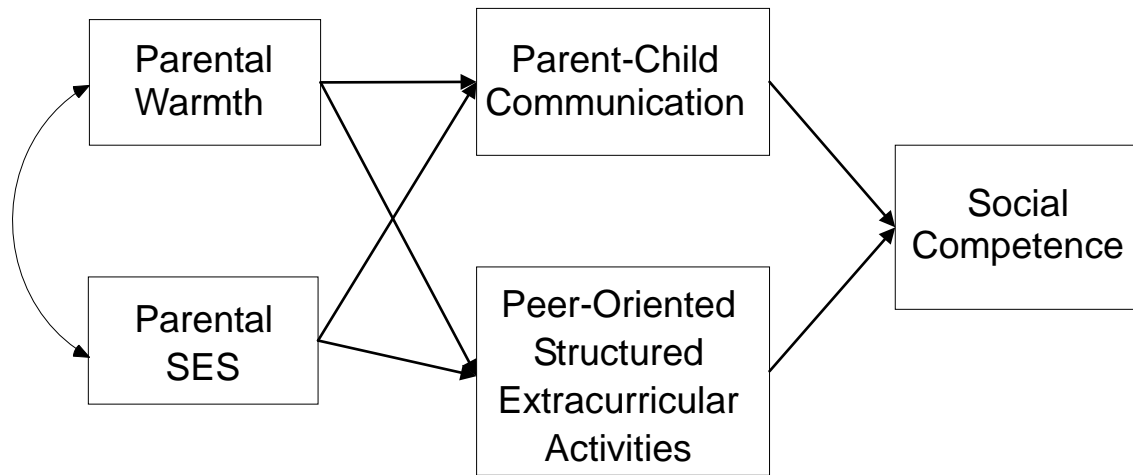
#### Parental Pathways of Social Development

Research has suggested that parents influence children's social development through either direct or indirect pathways (Ladd & Coleman, 1993; Ladd et al., 1999; Ladd et al., 1992; McHale et al., 2003; Parke, Burks, Carson, Neville, & Boyum, 1994; Parke et al., 1992; Parke et al., 1988). The direct pathway of social development refers to

parents actively selecting, modifying or structuring children's social environment to facilitate their peer relationships and interactions (Bronson, 2000; Ladd et al., 1992). Parents may arrange schedules for children's social activities, or provide instrumental support such as giving children rides to places (Bronson, 2000; McHale et al., 2003). Parents may also act as advisors or teachers in the family. Specifically, parents may enhance children's social skills by giving them advice or discussing appropriate ways to interact with their peers in social activities (McHale et al., 2003).

On the other hand, the indirect pathways of social development include parent-child interactions, parenting styles, and environment, which set the stage for later social development (Arthur, Bochner, & Butterfield, 1999; McHale et al., 2003; Parke et al., 1988). For example, parents who have a close relationship with their children may provide a secure emotional base for their children to develop new social relationships outside of the home (Arthur et al., 1999; McHale et al., 2003). Parents may also foster children's social development by serving as a model through positive daily interactions with their children (Arthur et al., 1999). In addition, the socioeconomic conditions of the family influence the amount of resources and opportunities available for children in their development (Conger & Dogan, 2007).





*Figure 1.* Direct and indirect pathways of social development.

This study investigates how parents directly (through parent-child communication and engaging children in peer-oriented structured extracurricular activities) and/or indirectly (through parental SES and parental warmth) influence children’s social development during their transition to elementary school. In the following sections, I will present these factors and discuss how they may interrelate and influence children’s social development. In addition, literature on the cultural differences in these factors will be discussed.

*Direct Pathways: Relationships between Parent-Child Communication,  
Peer-Oriented Structured Extracurricular Activities, and Social Competence  
Parent-Child Communication*

Parents and children have abundant chances to talk to each other every day. However, the meaning of parent-child communication has not been adequately defined

by researchers. Studies suggest that through daily parent-child conversation about past social experiences, children develop their social understandings by receiving feedback and information about the social world (Flannagan, 1996; Miller, Mintz, Hoogstra, Fung, & Potts, 1992; Miller, Potts, Fung, Hoogstra, & Mintz, 1990). In this study, parent-child communication is defined as parents and children having daily conversation about different aspects of the children's lives. In the process of family conversations, children are able to express their own opinions and receive feedback from their parents.

#### *Parent-Child Communication and Social Competence*

The significance of parent-child communication in children's social-cognitive development has been corroborated by many researchers (e.g., Applegate, Burleson, & Delia, 1992; Brown & Dunn, 1996; Laible & Thompson, 2000, 2002). Parents may foster children's development of social competence by engaging them in conversations about social interactions and relationships (Applegate et al., 1992; Flannagan, 1996; Ladd et al., 1993; Laible, 2004; Mize & Pettit, 1997). The topics between parents and children during conversation may include discussions about hypothetical social interaction scenarios or strategies for identifying and solving problems the children are encountering (Ladd et al., 1993). Ladd et al. (1993) indicated that through conversations about peer interactions and their relationships with their children, parents may help children solve their interpersonal problems and be prepared for future social interactions. For example, in a longitudinal study of the influence of parent-child communication on school-aged children's social development, Applegate et al. (1992) discovered that maternal communication was beneficial for children's development of social cognition (e.g., perspective-taking) and

communicative skills (e.g., persuasion, and comforting skills), even after controlling for demographic variables such as SES, family size, and gender.

The quality of parental advice and interaction styles are also influential for children's social development (Mize & Pettit, 1997; Russell & Finnie, 1990). Russell and Finnie (1990) stated that when having conversations about friends with preschool children, mothers of more socially competent children give more specific and helpful advice. In contrast, mothers of less socially competent children provide more general guidance such as "stay out of trouble" or "have fun."

Although the existing literature has demonstrated the importance of parent-child communication on children's development of social competence, most of the studies focus on early childhood. It is necessary to investigate how this routine parenting practice promotes children's mastery in social skills in their transition to a formal school environment.

#### *Peer-Oriented Structured Extracurricular Activities*

Peer-oriented structured extracurricular activities are usually perceived as out-of-school social activities which are well-organized, supervised by adults, and designed to build children's skills (Eccles & Gootman, 2002; Larson, 2000; Mahoney et al., 2005; Roth & Brooks-Gunn, 2003). Peer-oriented structured extracurricular activities differ from unstructured leisure activities (e.g., hanging out with friends or watching television) in that they have regular scheduled meetings, and offer guidance and supervision from adults. Furthermore, peer-oriented structured extracurricular activities provide opportunities for social interactions, help children achieve group goals, facilitate

children's skill development (Mahoney et al., 2005). These advantageous characteristics may set the stage for children's social development.

#### *Peer-Oriented Structured Extracurricular Activities and Social Competence*

Peers become increasingly important in social development as children enter a formal school environment. When children participate in peer-oriented structured extracurricular activities outside of school, they have plenty of opportunities to interact with peers (Ripke et al., 2006). The social experiences children gain during these interactions play a crucial role in the development of social competence (Eccles, 1999; Simpkins, Fredricks, Davis-Kean, & Eccles, 2006). For instance, positive experiences in social settings can help children in middle childhood develop positive attitudes toward engagement in such activities, and in their own competence (Eccles, 1999).

Research has shown that school-aged children's involvement in peer-oriented structured extracurricular activities such as sports teams and organized club activities fosters their social development (Fletcher, Nickerson, & Wright, 2003; Duda & Ntoumanis, 2005; Huston & Ripke, 2006; Mahoney et al., 2005; Ripke et al., 2006). These activities provide children with opportunities to interact with peers under the supervision of adults and gain social skills which are required for accomplishing tasks (Ripke et al., 2006). Fletcher et al. (2003), for instance, found that elementary-aged children who participate in sports or club activities tend to have greater psychological maturity and the ability to work with others and cope with failures.

Although the research has demonstrated a strong association between peer-oriented structured extracurricular activities and children's positive social outcomes,

a large portion of the studies only focus on the development of adolescents (Huston & Ripke, 2006). Studies on early middle childhood are still rare. It is imperative for researchers to further investigate the influence of involvement in such activities on children's social development in early middle childhood (Ripke et al., 2006).

*Indirect Pathways: The Influences of Parental Warmth and SES on Parent-Child Communication, Peer-Oriented Structured Extracurricular Activities, and Social Competence*

*Parental Warmth*

Parental warmth has long been identified in different factor-analytic studies in parenting literature. The dimensions of parental warmth reported by researchers were similar: love/hostility (Schaefer, 1959), warmth/hostility (Baldwin, 1955; Becker, 1964), and parental acceptance/rejection (Rohner, 1980). These similar dimensions delineated parent-child relationships in a continuum ranging from acceptance and expression of affection to strictness and hostility. Moreover, Baumrind's (1971) notion of authoritative parents encompasses the characteristic of high levels of parental warmth, whereas their counterparts, authoritarian parents, are usually observed to be rejecting and cold.

Other researchers have also suggested definitions for the concept of parental warmth (Baumrind, 1989; Maccoby, 1980; Rohner, 1980). Eisenberg and her colleagues (2001) asserted that warmth involves parents' inclination to be supportive and affectionate toward the child. For instance, warm parents are usually responsive to their child's needs, sensitive to the child's emotional states, and willing to show love and concern about the child either verbally or physically (Baumrind, 1989; Maccoby, 1980;

Rohner, 1980, 1986). Physical affection, according to Rohner (1980, 1986), is usually expressed through hugging, kissing, or caressing the child, while verbal affection is usually shown through praising, complimenting, or saying good things to the child. These definitions present different important aspects of parental warmth. This study incorporates the features discussed above and defines parental warmth as parents expressing abundant verbal and physical love and concern toward children. This definition incorporates both mothers' perceptions of their parent-child relationship and their positive parenting behaviors.

#### *Parental Warmth and Social Competence*

Studies have suggested that parents who are warm and responsive are more likely to have children who are socially competent (Baumind, 1989; Landry, Smith, & Swank, 2003). For instance, Baumrind (1989) indicated that the authoritative parenting style, which is characterized by a high level of warmth and democratic discipline, is associated with positive social development in children. Landry et al. (2003) also discovered that the provision of consistent warm and responsive parenting in the family from the preschool years facilitated children's development of social skills through middle childhood. These findings provide evidence for the long-term effects of parental warmth on children's social development.

#### *Parental Warmth and Parent-Child Communication*

Parental warmth may influence the effect of parent-child communication on children's social development (Laible & Thompson, 2007). This warmth-communication connection can be recognized by the term "intersubjectivity," which refers to shared

understandings and attention between two individuals (Rogoff, 1990). According to Vygotsky (1987), intersubjectivity plays an important role in parent-child communication, for it provides the foundation for verbal interactions as well as the acquisition of children's understandings of new information and social activities. Moreover, the authoritative parenting style, which is characterized by the combination of abundant affection and open communication, has been discovered to be associated with positive social behaviors such as being socially responsible and cooperative (Baumrind, 1966, 1971, 1989). Freitag and colleagues (1996) argued that German school-aged children who are competent in establishing and maintaining friendships are more likely to show mutuality and supportiveness in their communications with their mothers.

Although these arguments and findings all strengthen the importance of parental warmth in parent-child communication at home, few empirical studies have been done to examine this relationship in European American and Chinese American children's early middle childhood. It is crucial that we to investigate whether this relationship plays a role in children's social development when they enter elementary school.

#### *Parental Warmth and Peer-Oriented Structured Extracurricular Activities*

Literature that examines the relationship between parental warmth and peer-oriented structured extracurricular activities is scarce. Although there seems to be no direct connection between parental warmth and children's participation in peer-oriented structured extracurricular activities, this association may be understood in terms of the parenting styles children experience in the family. Parental warmth is regarded as one of the characteristics of the authoritative parenting style (Baumrind, 1971). It is possible that

parents who apply the authoritative parenting style in the family are more likely to take an interest in their children's needs and development, and in turn involve the children in activities or learning tasks to facilitate social development. To understand whether parental warmth contributes to children's engagement in peer-oriented structured extracurricular activities, further investigation is necessary.

### *Parental SES*

The term SES has been loosely defined to indicate the levels of parental occupation, education, income, or a combination of these variables (Hoff-Ginsberg & Tardif, 1995). Some researchers measure SES solely using one single factor such as occupational prestige (e.g., Stevens & Featherman, 1981), whereas other researchers regard SES as a multifaceted factor (e.g., Green, 1970, as cited in Hoff, Laursen, & Tardif, 2002). Green (1970) assessed SES using a three-factor index of family income, maternal education, and the occupation of the household head. On the other hand, Hollingshead's Four Factor Index of Social Status measured SES in terms of paternal and maternal education and occupation (Hollingshead, 1975, as cited in Hoff et al., 2002). A composite of parental education, income, and occupation is the most commonly used method to measure SES (Duncan & Magnuson, 2003; Hoff-Ginsberg & Tardif, 1995; Huston & Ripke, 2006). This study adopts the three-factor composite of parental education, income, and occupation to assess the concept of SES. This measure captures a broader picture of SES and each indicator plays an influential role in parenting practices and children's development (Duncan & Magnuson, 2003).



### *Parental SES and Socialization*

Parental SES positively associates with parents' utilization of parenting strategies, parental goals and practices, and the quality of parent-child relationships (Bee, Egeren, Streissgth, Nyman, & Leckie, 1969; Conger & Conger, 2002; Conger & Dogan, 2007; Greenberg, & Formanek, 1974; Kohn, 1963, 1979, 1995; Zussman, 1978). Family financial difficulty usually produces economic pressures on parents and adversely influences their emotions and behaviors in daily life. These negative emotions and behaviors may in turn impact parents' choices of socialization strategies, as well as their interactions and relationships with children (Conger & Conger, 2002). Conger and Dogan (2007) suggested that parents with higher SES are more likely to have greater resources (e.g., financial, social, and human capital) to invest in children's development. Since parental SES usually influences the quality of the home environment and parenting practices, it is necessary to take this factor into account when investigating the association between parenting and children's social development.

### *Parental SES and Parent-Child Communication*

The ways parents communicate with their children in the family may differ according to their SES (Greenberg & Formanek, 1974; Zussman, 1978). For instance, middle-class mothers are usually found to have more verbal communication with their children and use fewer commands during interactions than working-class mothers (Greenberg & Formanek, 1974; Hoff-Ginsberg, 1991). Moreover, inductive parenting strategies such as reasoning and providing suggestions and explanations are usually more favored by middle-class mothers than working-class mothers (Zussman, 1978).

However, research on the relationship between parental SES and communication styles only addresses on young children and their language development (e.g., Greenberg & Formanek, 1974; Hoff-Ginsberg, 1991). Little research has been done to investigate the effects of parent-child communication about social relationships on school-aged children's development of social competence. This relationship will be further examined in this study.

#### *Parental SES and Peer-Oriented Structured Extracurricular Activities*

Parental SES may influence levels of children's engagement in peer-oriented structured extracurricular activities. Previous research has shown that mothers with higher SES are more likely to arrange peer-oriented structured extracurricular activities (e.g., clubs and sports teams) for their school-aged children than lower-SES mothers (O'Donnell & Stueve, 1983; Pettit, Laird, Bates, & Dodge, 1997). This tendency can be explained by the fact that higher-SES parents usually have greater resources and thus can devote the time and effort to support their children's development (Conger & Dogan, 2007). Therefore, it is justifiable to postulate that, compared with children raised in lower-SES families, children raised in higher-SES families have greater access to peer-oriented structured extracurricular activities and therefore are more likely to benefit from participating in such activities.

#### *Parental SES and Parental Warmth*

Parental SES may influence levels of parental warmth in the family. Kohn (1979) suggested that compared with working-class parents, middle-class parents tend to be more supportive and concerned about children's psychological states. Working-class

parents, in contrast, are usually reported to be restrictive, value more conformity to authority, and set constraints on their children (Kohn, 1977, 1979). One explanation for lower-SES parents being more restrictive than higher-SES parents is that they need to do so to protect their children in unsafe living environments (Kelley, Sanchez-Hucles, & Walker, 1993). Therefore, we can not conclude that children in lower-SES families experience lower level of parental warmth than those in higher-SES families. This association will be further examined in this study.

### Cultural Differences

#### *Cultural Differences in Social Competence*

Culture plays a crucial role in understanding children's social competence. Cultural values and beliefs usually guide parents' childrearing practices and socialization goals, which in turn influence children's developmental outcomes (LeVine, 1988; McGillicuddy-De Lisi, 1985; Super & Harkness, 1986). The socialization practices of Chinese immigrant mothers and European American mothers may be influenced by the ways they were socialized in their culture of origin. Research has shown that children raised in different cultural backgrounds display different patterns of behaviors during social interactions (Chen, French, & Schneider, 2006). For example, in Western societies children are more prone to be socialized to be autonomous, self-directive, and assertive in social relationships. On the other hand, children who grow up in Asian societies are more likely to be socialized to be self-restrained, cooperative, connected, and exhibit greater self-control when interacting with others (Chen, 2000b; Chen et al., 2006; Domino, 1992; Ho, 1986; Orlick, Zhou, & Partington, 1990).

The interpretation of children's social behaviors may also vary with culture (Chen et al., 2006). The interpretations and evaluations of behavior in different cultural contexts establish different standards for appropriate social interactions (Chen et al., 2006). In Western societies, children who show sensitivity and shyness during social interaction are usually perceived as being anxious or lacking self-confidence (Asendorpf, 1990). However, these characteristics are usually considered to be indicators of being mature and well-behaved in traditional Chinese culture (King & Bond, 1985; Yang, 1986). Cultural differences in individuals' interpretations of social behavior may lead to subjective or even biased evaluations of children's social competence. Therefore, it is important to be aware of cultural differences in parents' beliefs and perceptions of their children's social competence as well as the childrearing practices they use to promote their children's social development.

#### *Cultural Differences in Parent-Child Communication*

The patterns of parent-child communication in the family may be different across and within cultures (Hall, 1976). These variations in communication styles are explicable by Hall's distinctions in the theory of high-context and low-context communication. Low-context communication refers to the use of explicit messages during verbal interactions. Individuals in this communication system are required to be direct and open because the information between individuals is mainly encoded within the meaning of the verbal message itself rather than in the social context. High-context communication involves the use of implicit or indirect messages, in which information is mainly embedded within the social context or internalized in the individual. According to such

determinants, the clarity of verbal messages is relatively unimportant (Hall, 1976). Although both low- and high-context communication styles are used in all cultures, each cultural group usually prefers one over the other (Hall, 1976). Hall (1976) suggested that the low-context communication style is more frequently applied in American culture, whereas the high-context communication style is more commonly used in Chinese culture.

Hall's concept of low-context communication style coincides with the concept of "*hanxu*," which means "to be implicit," in Chinese culture (Gao, Thing-Toomey, & Gudyhunst, 1996). In order to avoid placing other people into an uncontrollable situation or harming their existing relationships, individuals usually choose not to use direct communication to deal with situations and their emotions (Gao et al., 1996). It is also true when individuals have positive emotions toward each other. Moreover, in Chinese culture, individuals only speak when they are recognized, and recognition is usually based on the power position, education, or specific expertise of the individuals (Gao et al., 1996). As a result, children in Chinese families are generally socialized to listen to their parents during family conversations. Interrupting a conversation is not considered an appropriate behavior for children (Gao et al., 1996). However, Zevenbergen and Hu (2000) found that compared with European American mothers, Chinese immigrant mothers showed greater verbal responses to their children when the children have behavioral problems. For example, European American mothers tended to make short and concise comments about their children's misbehavior, while Chinese immigrant mothers tended to explain to their children why their behavior was not acceptable.

The findings of previous research suggest that there are cultural differences in the frequency and quality of parent-child communication between European American and Chinese immigrant families. It is necessary to investigate whether parent-child communication and its influence on European American and Chinese American children's social development differ when they enter early middle childhood.

#### *Cultural Differences in Peer-Oriented Structured Extracurricular Activities*

When children participate in social activities, they learn how to behave appropriately during social interactions in the culture group (Edwards, de Guzman, Brown, & Kumru, 2006). Parents with different cultural backgrounds may hold different beliefs as to the importance and functions of peer-oriented structured extracurricular activities, and in turn engage their children in different kinds of these activities. However, studies investigating cultural differences in children's participation in peer-oriented structured extracurricular activities in early middle childhood remain scant. Research is needed to investigate whether parents' cultural beliefs play a role in shaping European American and Chinese American children's activity experiences, and how peer-oriented structured extracurricular activities influence the social development of school-children from these two cultural backgrounds.

#### *Cultural Differences in Parental Warmth*

Researchers have suggested that the meanings and effects of parental warmth on children's social behaviors are similar across cultures (Lau, Lew, Hau, Cheung, & Berndt, 1990; Ho, 1986; MacDonald, 1992; Rohner, 1986). However, in different cultures there may be qualitative differences in the way parents show warmth to their children (Chao,

2000). In Western societies, parental warmth usually incorporates both emotional and physical love, whereas in Eastern societies warmth is usually expressed through support, involvement, and investment (Chao, 2000).

Previous research on cultural differences in parenting has indicated that European American parents usually apply the authoritative parenting style. Chinese immigrant mothers, on the other hand, tend to adopt a restrictive or controlling approach (Chiu, 1987; Lin & Fu, 1990). Some researchers, however, have argued that the characteristic of Chinese parenting “*guan*,” meaning “to care for” or “to govern,” and “training,” meaning “teaching” or “educating,” are equivalent to a supportive and authoritative parenting style (Chao, 1994; Tobin et al., 1989; Wu, 1985). These two concepts include elements of firm control, involvement, and parental concern in the parents’ childrearing practices, which may be perceived as “controlling” from a different cultural perspective. Moreover, in Chinese culture it is believed that individuals’ good intentions should be conveyed through actions rather than words (Confucius, 500 BC/1992). Chinese parents may exhibit love and concern for their children in terms of being considerate or doing nice things rather than through saying nice words or having warm physical contact. However, these parenting practices may not be regarded as a way of expressing parental warmth in other cultures.

Based on the above findings, there may be qualitative differences between European American and Chinese immigrant families in the way parents show warmth to children. It is important that developmental psychologists further explore how the differences in European American and Chinese immigrant mothers’ expressions of

warmth toward their children influence their parenting practices and their school-aged children's social development.

### Acculturation

Acculturation, according to Berry (2005), is defined as “the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members” (p.698). At an individual level, acculturation involves a process through which individuals adjust or change their cultural values, attitudes, and behaviors in the face of a new cultural environment (Berry, 2005; Berry, Trimble, & Olmedo, 1986).

Studies have shown that for Chinese immigrant families, their adaptation to the U.S. culture is usually accompanied by changes in parenting practices (Chiu, 1987; Lin & Fu, 1990). For example, in a study of childrearing practices across Chinese, Chinese immigrant, and European American families, Lin and Fu (1990) discovered that there was a gradual change of patterns in parenting practices (e.g., levels of parental control) among Chinese immigrant mothers. These findings suggested that after immigrating to the United States, Chinese immigrant mothers may alter their beliefs about and behaviors in parenting through the process of seeking balance between Chinese and American cultures (Coll et al., 1995; Lin & Fu, 1990).

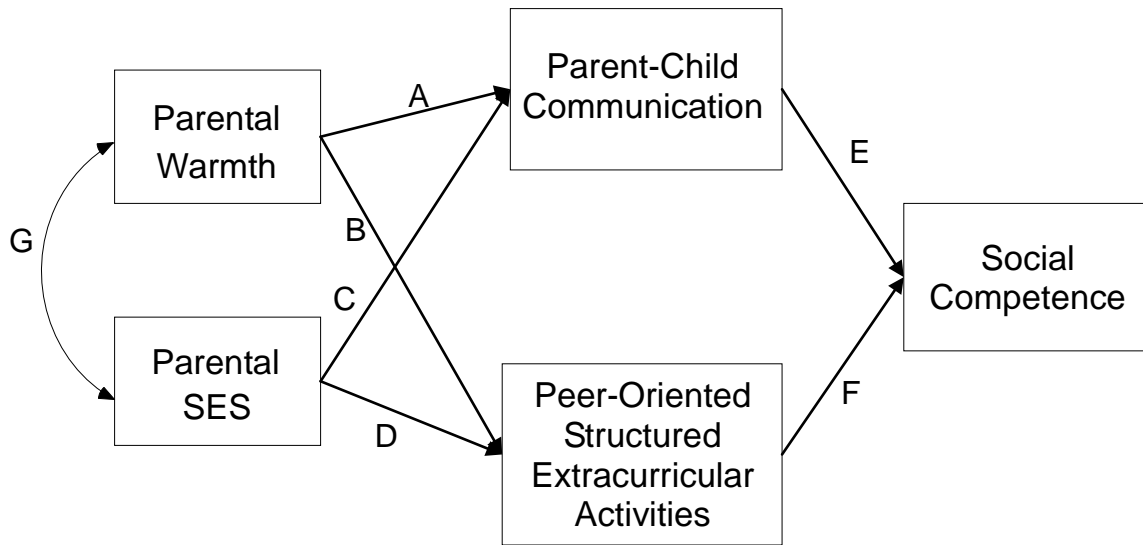
### The Conceptual Model

This chapter reviews existing literature on children's social development. Specifically, the focus lies in investigating how parents directly and indirectly facilitate children's development of social competence. Previous studies have suggested that



parental SES, parental warmth, parent-child communication, and children's engagement of peer-oriented structured extracurricular activities influence children's social competence. Nevertheless, these factors have not been simultaneously considered as researchers seek to understand children's social development. The goal of this study is to understand the developmental outcomes for school-aged children's social development.

Figure 2 presents the conceptual model for children's development of social competence. First of all, I will test whether parental SES (path C) and warmth (path A) influence parent-child communication, which in turn impacts children's social competence (path E). Similarly, I will examine whether parental warmth (path B) and SES (path D) influences levels of children's engagement in peer-oriented structured extracurricular activities, which in turn contributes to the development of children's social competence (path F). Moreover, I will test whether there is an association between parental warmth and parental SES (correlation G).



*Figure 2.* The conceptual model.

Another goal of this study is to understand whether the developmental outcomes of children's social development differ in Chinese immigrant and European American families, and what specific features in Chinese immigrant families shape the cultural differences. As first-generation immigrants, Chinese immigrant mothers were raised in Chinese culture. However, they need to adapt by learning the culture of the host country when they immigrate to the United States (Zane & Mak, 2003). It is necessary to understand how Chinese immigrant mothers' immigration status and their adjusted parenting beliefs and practices influence their school-aged children's social development.

## CHAPTER THREE

### METHODOLOGY

In this study, I used a mixed-methods approach to investigate how childrearing environment and practices influence Chinese American children's social development during their transition from kindergarten to elementary school. Specifically, I aimed to understand how the family environment (parental warmth and SES), children's engagement in peer-oriented structured extracurricular activities, and parent-child communication contribute to first-grade Chinese American children's development of social competence. Moreover, I would like to explore the effects of culture on Chinese American children's social development.

The first phase of analysis was quantitative in nature, and focused on examining cultural differences in the effects of the key parenting variables discussed above on the social development of European American and Chinese American children. Based on the findings of the quantitative analysis, in the second phase, I adopted a qualitative approach to further investigate how the parenting beliefs and practices of Chinese immigrant mothers contribute to their children's different developmental outcomes of social development. In this chapter, specific methodological procedures for research design, sampling, measurement, and data analysis are presented.

#### Research Questions

Based on the aims of this dissertation study, I proposed six major research questions with several sub-questions:

Question 1: How does parent-child communication influence children's social

development?

1-1: Does parent-child communication predict children's social competence?

1-2: Does the effect of parent-child communication on children's social competence differ between Chinese American and European American children?

Question 2: How does children's engagement in peer-oriented structured extracurricular activities influence their social development?

2-1: Does children's engagement in peer-oriented structured extracurricular activities predict their social competence?

2-2: Does the effect of children's engagement in peer-oriented structured extracurricular activities on their social competence differ between Chinese American and European American children?

Question 3: How does parental warmth influence parent-child communication and children's engagement in peer-oriented structured extracurricular activities?

3-1: Does parental warmth predict the level of parent-child communication in the family?

3-2: Does parental warmth predict children's engagement in peer-oriented structured extracurricular activities?

3-3: Does the effect of parental warmth on parent-child communication differ between European American and Chinese immigrant families?

3-4: Does the effect of parental warmth on children's engagement in

peer-oriented structured extracurricular activities differ between European American and Chinese American children?

Question 4: How does parental SES influence parent-child communication and children's engagement in peer-oriented structured extracurricular activities?

4-1: Does parental SES predict parent-child communication?

4-2: Does parental SES predict children's engagement in peer-oriented structured extracurricular activities?

4-3: Does the effect of parental SES on parent-child communication differ between European American and Chinese immigrant families?

4-4: Does the effect of parental SES on children's engagement in peer-oriented structured extracurricular activities differ between European American and Chinese immigrant families?

4-5: How does parental SES relate to parental warmth?

4-6: Does the relationship between parental SES and warmth differ between European American and Chinese immigrant families?

Question 5: Does the length of time the mothers have been staying in the U.S. influence Chinese immigrant mothers' parenting practices and their children's development of social competence?

Question 6: What are the cultural characteristics of Chinese immigrant mothers' parenting beliefs and practices in regard to their influences on children's social development?

## Research Hypotheses and Rationales

Twelve hypotheses were proposed based on the first four main research questions. The hypotheses for testing the effects of the parenting factors on children's development of social competence are first listed below:

Hypothesis 1-1: Parent-child communication increases children's social competence.

Rationale: Research has demonstrated that parent-child communication promotes children's social development (Laible & Thompson, 2000, 2002; Russell & Finnie, 1990). Through discussions about social relationships and interpersonal problems with parents, children obtain skills to solve problems in their social lives, and become more socially competent (Ladd et al., 1993).

Hypothesis 2-1: Children's engagement in peer-oriented structured extracurricular activities increases their social competence.

Rationale: Parke et al. (2006) suggested that peer-oriented structured extracurricular activities, which provide opportunities for interaction with adult guidance and group goals, are helpful for children's development of social skills. Other studies also indicated that children who participate in peer-oriented structured extracurricular activities have better collaboration skills and are more psychologically mature (Duda & Ntoumanis, 2005; Fletcher et al., 2003).

Hypothesis 3-1: Higher parental warmth predicts greater parent-child communication.

Rationale: Studies have shown that warm and responsive relationships between

parents and children promote communication in the family (Baumrind, 1966, 1971, 1989). Children who are active and responsive during conversations with their mothers are found to be more socially competent (Freitag et al., 1996).

Hypothesis 3-2: Greater parental warmth has a positive influence on children's engagement in peer-oriented structured extracurricular activities.

Rationale: There has been little research emphasizing the association between parental warmth and children's engagement in peer-oriented structured extracurricular activities. Nevertheless, parental warmth has been recognized as one important characteristic of the authoritative parenting style (Baumrind, 1971). Parents who favor the authoritative parenting style are usually concerned about children's needs and are willing to make investments in their children's development. Therefore, it is hypothesized that parents who show greater parental warmth are more likely to let their children participate in peer-oriented structured extracurricular activities. However, this hypothesis is exploratory and will be examined in this study.

Hypothesis 4-1: Higher parental SES predicts more parent-child communication.

Rationale: Compared with mothers with lower SES, higher-SES mothers are usually found to engage in more verbal communication and to use an interactive approach when talking with their children (Greenberg & Formanek, 1974; Hoff-Ginsberg, 1991). Children in higher-SES families, therefore, may have more opportunities to express their feelings and discuss problems with their parents.

Hypothesis 4-2: Higher parental SES predicts greater children's participation in peer-oriented structured extracurricular activities.

Rationale: Children from lower-SES families are usually found to engage less frequently in organized sport activities and clubs compared with those from higher-SES families (Huston & Pipke, 2006; O'Donnell & Stueve, 1983; Pettit et al., 1997).

Researchers also suggested that parents who have adequate financial resources tend to be involved in and encourage their children to participate in peer-oriented structured extracurricular activities (Conger & Dogan, 2007; Fletcher et al., 2003).

Hypothesis 4-5: Parental SES is positively associated with parental warmth.

Rationale: Conger and Conger (2002) argued that the stress derived from financial hardship in the family usually negatively influences parents' emotions and behaviors, which in turn have an adverse effect on their parenting strategies and parent-child relationships. Although parents with lower SES may have more challenges in their lives, they may still show their children love and concern as much as parents with higher SES. Therefore, this hypothesis is exploratory and will be further examined in the study.

Hypotheses for testing cultural differences in the effects of parenting factors on children's social development are listed below:

Hypothesis 1-2: The influence of parent-child communication on the development of social competence is greater for European American children than for Chinese American children.

Rationale: Hall (1976) suggested that the low-context communication style, characterized by explicit verbal interaction, is widely used in Western culture: open communication is usually encouraged as it is a common way to understand each other. Gao et al (1996) also indicated that the ability of children to listen during family



conversations is usually encouraged in Chinese families. Compared with children raised in Chinese immigrant families, children in European American families are more likely to have verbal interactions with their parents, and in turn benefit more from talking about their daily lives.

Hypothesis 2-2: The influence of peer-oriented structured extracurricular activities on the development of social competence differs between Chinese American and European American children.

Rationale: Studies on parenting have suggested that Chinese immigrant mothers tend to enroll their children in various kinds of extracurricular activities to facilitate their learning (Chao, 1996). These extracurricular activities are usually academic related or one-on-one music classes (Chao, 1996; Kao, 1995), which are less likely to promote children's social development. Therefore, it remains unclear whether Chinese American children engage in more peer-oriented structured extracurricular activities, as defined as well-organized activities with adult supervision, group goals, and peer interactions, than European American children. There has been scarce research investigating cultural differences in children's engagement in peer-oriented structured extracurricular activities as well as its influences on children's development of social competence. Since Chinese American children have been found to engage in many extracurricular activities, it is hypothesized that the effect of peer-oriented structured extracurricular activities on Chinese American children's social development is different from European American children. However, this hypothesis is exploratory and tentative, and will be examined in this study.

Hypothesis 3-3: The influence of parental warmth on parent-child communication is greater for European American children than for Chinese American children.

Rationale: Parental warmth, defined in this study as physical, verbal, and emotional demonstrations of affection, has been found to be higher in European American families (Chao, 2001; Chao & Tseng, 2002). Although it is subjective to assume that European American children receive greater warmth in their families than Chinese American children, it is possible that greater parental warmth encourages children to engage in more conversations with their parents. Therefore, it is hypothesized that children in European American families are more likely to benefit from parental warmth and communicate more with their parents.

Hypothesis 3-4: The influence of parental warmth on children's engagement in peer-oriented structured extracurricular activities is different between European American and Chinese immigrant families.

Rationale: As discussed earlier, European American parents are more emotionally and physically expressive in their parent-child relationships (Chao, 2001; Chao & Tseng, 2002). Nevertheless, it is too arbitrary to assume that European American children experience a greater level of parental warmth, which can be related to children's greater engagement in peer-oriented structured extracurricular activities (Baumrind, 1971). Since European American and Chinese immigrant mothers show warmth to their children in different ways (Chao, 2000), it is hypothesized that the effect of parental warmth on the level of engagement in peer-oriented structured extracurricular activities is different between European American and Chinese immigrant families. This hypothesis is

exploratory, and will be examined in this study.

Hypothesis 4-6: The association between parental SES and warmth does not differ between European American and Chinese immigrant families.

Rationale: There has been scarce literature showing that cultural differences in the association between parental SES and warmth exist between European American and Chinese immigrant families. Nevertheless, one study on parental SES and children's behavior between other ethnic groups (European American and African American families) has reported that there was no cultural difference in the relationship between parental SES and warmth (Dodge, Pettit, & Bates, 1994). Hence, it is hypothesized that the association between parental SES and warmth does not differ between these two cultural groups.

The effects of parental SES on parent-child communication and on children's engagement in peer-oriented structured extracurricular activities will be assumed to be the same in both European American and Chinese immigrant families since there has been a lack of empirical evidence suggesting cultural differences between these two groups.

### Quantitative Phase

The first part of this dissertation study is a secondary analysis of data from an ongoing longitudinal study entitled the Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K). The ECLS-K study, sponsored by the National Center for Education Statistics (NCES), collected a nationally representative sample of 21,260 kindergarteners in the fall of 1998 and followed the same cohort of children until the

majority of them entered the eighth grade. Because they occupy a comparatively small portion of the population in the U.S., children of the Asian and Pacific Islander subgroups were oversampled.

The ECLS-K project investigates the incorporated effects of family, school, and community on children's development and school performance (NCES, 2006). Information regarding children's cognitive, physical, social, and emotional development is gathered from schools, teachers, the children, and their families. Descriptive data such as teacher qualifications, classroom curriculum and environment, and school environment are also collected. Moreover, this project puts special emphasis on the influence of parents and family on children's adjustment to a formal school environment and on school success through the elementary years (NCES, 2006). During both school years of kindergarten and first grade, parents were asked to provide information about their families and home activities through a computer-assisted telephone interview or computer-assisted personal interview for families without a telephone. The interviews generally lasted for one hour and were conducted primarily in English. However, alternative choices (e.g., several different Asian languages) were also available for parents who spoke other languages (NCES, 2004). The information gathered from parents includes ethnicity, SES (parent income, education, and employment), family structure, child care, discipline and parent-child relationships, home environment and activities, parental involvement, community resources, and children's summer activities (NCES, 2002). In short, this ECLS-K data set enables researchers to understand children's status at their transition into school and their progress in development through the eighth grade

(NCES, 2004).

### *Sample*

An analytical sample was drawn from the Longitudinal Kindergarten-Fifth Grade Public-Use Data file. Generally speaking, mothers are the primary caregivers of children and play an important role in children's development (Barnard & Solchany, 2002). Therefore, in this study, kindergarteners who were raised by European American and first-generation Chinese immigrant mothers were selected.

Several criteria were applied to select the participants for inclusion in the sample.

First, in order to identify immigrant Chinese and European American mothers, time-invariant variables, such as the mothers' country of birth and self-reported ethnicity, were used to select cases. Specifically, mothers who were born in China, Hong Kong, and Taiwan and who reported themselves as Asian or Pacific Islander were identified as Chinese immigrant mothers. Similarly, mothers who were born in the United States and identified themselves as White were defined as European American mothers.

Second, since mothers are generally the primary caregivers in the family, it is necessary to ensure that the mothers in this study lived in the same household with the child. Cases in which the mothers were absent in the child's household in either the kindergarten or first grade were removed from the sample.

Third, only mothers whose children did not have a disability across time were selected. Research shows that children who have a disability may have difficulty in developing social competence (Gresham & MacMillan, 1997). Because this factor may confound the results of the study, the cases in which the children were reported as having

disabilities from kindergarten through the fifth grade were excluded from the sample.

Finally, cases where the mothers did not answer any of the variables chosen in this study were deleted.

After screening cases using these four criteria, 114 first-generation Chinese immigrant mothers and 8,316 European American mothers were identified. In order to maximize the number of participants in the sample, all of the valid immigrant Chinese cases were selected. Because of an unbalanced ratio of Chinese immigrant and European American mothers, European American mothers were randomly selected to make sure that the ratio of the larger group to the smaller group is not greater than 1.5 to avoid problems associated with unequal residual variances between groups. Consequently, 170 European American mothers were randomly selected using the SPSS 15.0 statistical program. The combined number of participants in final analytic sample was 284 cases.

### *Measures*

#### *Social Competence*

Social competence in the ECLS-K study was assessed by an adapted version of Gresham and Elliot's Social Skills Rating System (Gresham & Elliot, 1990). In the first grade, parents were asked to rate their children's social skills in terms of the frequency of their children's exhibition of certain behaviors and social skills. The adapted Social Rating Scale (SRS) is a 4-point scale ranging from 1 (student never exhibits this behavior) to 4 (student exhibits this behavior most of the time), with another option, "no opportunity," indicating that the parent has no opportunity to observe the behavior. In this current study, three subscales from the parent SRS were used to measure first-graders'

social competence: *approaches to learning*, *self-control*, and *social interaction*. The *approaches to learning* subscale contains six items and measures the degree to which a child showed behaviors such as persistence, concentration, eagerness to learn, and responsibility. As for the *self-control* subscale, five items used to measure behaviors include throwing tantrums, fighting, arguing, and getting angry. The *social interaction* subscale includes three items and focuses on behaviors relating to making and keeping friends, interacting with peers, and joining play at ease (NCES, 2004). Rock and Pollack (2002) reported the split-half reliabilities of the three subscales in the ECLS-K dataset: .69 for *approaches to learning*, .75 for *self-control*, and .69 for *social interaction*. Scores on the items in each subscale were summed and averaged. Greater values indicated higher levels of social skills.

#### *Parental SES*

The ECLS-K study applied multiple assessments for parental SES. One of the assessments was measured at the household level and was a composite score derived from a logarithm of household income, parental education, and parents' occupation, with higher values representing higher SES (NCES, 2004). This SES measure was a continuous variable, and was gathered each year when parental data were collected. In this study, parental SES was assessed using the computed SES score in the kindergarten year.

#### *Parental Warmth*

Parents of kindergarteners were asked to report their perceptions of the quality of their interactions and relationships with their children. Specifically, eight statements were

assessed on a 4-point scale ranging from 1 (completely true) to 4 (not at all true). Items which were positively worded were reverse scored so that higher values represented greater levels of parental warmth (see Appendix A). Confirmatory factor analysis and a test of strong invariance were conducted for both the European American and Chinese immigrant subgroups to ensure that the items hold the same meaning for both cultural groups (Byrne, Shavelson, & Muthen, 1989; Millsap & Kwok, 2004; Vandenberg & Lance, 2000; see Appendix D for the results). The results of these analyses showed that three items represented the definition of parental warmth for both groups in this study: (1) “Most of the time I feel that (child’s name) likes me and wants to be near me” (*like*); (2) “(Child’s name) and I often have warm, close times together” (*warm*); and (3) “Even when I’m in a bad mood, I show (child’s name) a lot of love” (*show*). This construct was measured as a latent variable, with the three items being the indicators. The factor loadings and intercepts of *like* and *warm* were set to be the same between the two cultural groups, whereas the factor loading and intercept of *show* were freely estimated as suggested by the invariance testing. The reliability of the three items was .60 in the European American subgroup and .62 in the Chinese immigrant subgroup.

#### *Parent-Child Communication*

Parent-child communication was measured with a composite score of items relating to the verbal interactions within the family (see Appendix B). When their children were in the first grade, parents in the ECLS-K study were asked to rate six statements on a 4-point scale ranging from 1 (never) to 4 (very often). Items which were negatively worded were reversely scored so that higher values indicated greater levels of



parent-child communication. Confirmatory factor analysis and tests of measurement and strong invariance were conducted to ensure that all the items relating to parent-child communication measured the same construct and had the same meanings in both cultural groups (Byrne et al., 1989; Millsap & Kwok, 2004; Vandenberg & Lance, 2000; see Appendix E for the results). Three items were selected and summed: (1) “Even if I am really busy, I make time to listen to (child’s name)” (*listen*), (2) “I encourage (child’s name) to tell me about (his/her) friends and activities” (*friend*), and (3) “I encourage (child’s name) to express (his/her) opinions” (*opinion*). The reliability of this construct for the European American subgroup was .73, and .66 for the Chinese immigrant subgroup. Scores on the three items were summed. Higher values indicated greater levels of parent-child communication.

#### *Peer-Oriented Structured Extracurricular Activities*

The construct of peer-oriented structured extracurricular activities was measured using three items asking whether the child participated in organized extracurricular activities such as scouts and athletic activities outside of school (see Appendix C). These items were dichotomous variables (yes/no) and were gathered in the kindergarten year. Scores on the three items were summed and reversely scored so that higher values represented the child engaging in more peer-oriented structured extracurricular activities.

#### *Years of Stay in the U.S.*

This variable was only applicable to the Chinese immigrant subgroup and was used to control for the effect of acculturation on the mothers’ parenting behaviors. The construct of acculturation has been assessed in different ways. Some researchers

measured acculturation using standardized instruments that assess the extent to which individuals' beliefs, behaviors, and preferences reflect their home and their host cultures (e.g., Barry, 2001; Kwan & Sadowsky, 1997). Others measure this concept by examining individuals' language use (e.g., Wallen, Feldman, & Anliker, 2002). The ECLS-K data set did not include a standardized, global measure of parental acculturation, but did ask mothers to report their current age each year and their age when they immigrated to the United States. Given this limitation, the variable of "years of stay in the U.S." was chosen as a proxy for the level of acculturation of Chinese immigrant mothers. Research has also suggested that there is a positive association between the length of stay in the United States and the level of acculturation in the Chinese immigrant families (Hulei, Zevenbergen, & Jacobs, 2006).

In the ECLS-K dataset, parents of first graders were asked to report their age when they immigrated to the United States. The variable "years of stay in the U.S." was then created by subtracting mothers' age when they immigrated to the United States from their current age. The value of this variable ranged from 3 to 38.

### *Participants*

#### *Demographic Characteristics of Samples*

Descriptive statistics were first calculated using the SPSS program to describe the characteristics of the samples. Table 1 shows demographic information about the European American and Chinese immigrant mothers and their households. The age of the mothers ranged from 21 to 47 and was significantly different between the two subgroups ( $t(253) = 3.42, p < .01$ ). Specifically, the mothers in the Chinese immigrant sample were

significantly older ( $M = 36.38$ ,  $SD = 4.48$ ) than those in the European American sample ( $M = 34.05$ ,  $SD = 5.53$ ). The number of family members in the household ranged from 2 to 12 and did not differ significantly between the two cultural groups. However, there was a significant difference in the number of siblings per family ( $t(253) = 3.11$ ,  $p < .01$ ), with the European American children ( $M = 1.40$ ,  $SD = 1.11$ ) having significantly more siblings than Chinese American children ( $M = 1.00$ ,  $SD = .69$ ). The marital status for the majority of the mothers was married (80% for the Chinese immigrant sample and 75% for the European American sample). Most of the mothers were the biological mother of their children (97% for the Chinese immigrant sample and 79% for the European American sample). As for the composition of the Chinese immigrant sample, 62 % of the mothers came from China, 15% came from Hong Kong, and 23% came from Taiwan.

Table 1

*Demographic Variables for the European American and Chinese Immigrant Subgroups*

	<i>M (SD)</i>		
	Chinese Immigrant ( <i>N</i> = 114)	European American ( <i>N</i> = 170)	Total
Age of Mother (yrs.)	36.38 (4.48)	34.05 (5.53)	34.87* (5.29)
Number of Siblings	1.00 (0.69)	1.40 (1.11)	1.26* (1.00)
Number of People in Household	4.24 (0.89)	4.36 (1.25)	4.32 (1.14)
	<i>%</i>		
	Chinese Immigrant ( <i>N</i> = 114)	European American ( <i>N</i> = 170)	Total
Sex of Child (Male)	60.6%	50.0%	56.3%
Marital Status (Married)	80.0%	75.4%	78.2%
Type of Mother (Biological)	97.1%	78.9%	89.8%

\**p* < .05.*Data Analysis**Outliers*

In this study, a participant with a *z*-score greater than an absolute value of 4 in any one variable was identified as an outlier. In the European American subsample, two such cases in the variable of *self-control* were found (*z* = -4.17). In the Chinese immigrant subgroup, one outlier was found in *like* (*z* = 4.99). According to Shiffler (1988), the largest possible *z* value in a data set with a sample size of 294 is 17.12. Because there was no legitimate reason for deleting these cases, all were retained in the analysis.

### *Normality*

As for the examination of the normality assumptions, the skewness and kurtosis of data for both the European American and Chinese immigrant samples were tested. Kline (2005) suggested that an absolute value of the skew index that is lower than 3 is considered adequate for skewness. For kurtosis, an absolute value of the kurtosis index that is lower than 8 is acceptable (Kline, 2005). Tables 2 and 3 show the range, mean, standard deviation, kurtosis, and skewness for the key variables examined in this study for the European American and Chinese immigrant subgroups. The values of skewness and kurtosis of all variables met the desired absolute value of lower than 3 for skewness and of lower than 8 for kurtosis.

Table 2  
*Descriptive Statistic for Study Variables for the European American Subgroup (N = 170)*

Variable	Range	Mean	SD	Skewness	Kurtosis
Parental SES	-1.34 - 2.12	.33	.730	.182	-.735
Peer-Oriented Structured Extracurricular Activities	0 - 3	.93	.760	.383	-.407
Parental Warmth					
<i>Warm</i>	2 - 4	3.72	.526	1.736	2.191
<i>Like</i>	2 - 4	3.74	.505	1.789	2.406
<i>Show</i>	2 - 4	3.35	.760	.714	-.880
Parent-Child Communication	6 - 12	11.03	1.346	-1.439	1.553
Social Competence					
<i>Approaches to Learning</i>	1.83 – 4.00	3.20	.455	-.245	-.521
<i>Self-Control</i>	1.20 – 4.00	3.04	.473	-.908	1.764
<i>Social Interaction</i>	2.33 – 4.00	3.49	.448	-.598	-.452

Note: The scoring of the items in the construct of parental warmth has been reversed so that higher scores indicate greater parental warmth.

Table 3

*Descriptive Statistic for Study Variables for the Chinese Immigrant Subgroup (N = 114)*

Variable	Range	Mean	SD	Skewness	Kurtosis
Parental SES	-1.56 - 2.12	.46	.923	.018	-1.151
Peer-Oriented Structured Extracurricular Activities	0 – 3	.40	.614	1.014	.057
Parental Warmth					
<i>Warm</i>	2 – 4	3.63	.612	1.410	.888
<i>Like</i>	1 – 4	3.66	.607	1.478	1.309
<i>Show</i>	1 – 4	3.07	.912	.494	-.847
Parent-Child Communication	5 - 12	9.83	1.681	-.828	.401
Social Competence					
<i>Approaches to Learning</i>	1.83 – 4.00	2.85	.512	-.202	-.201
<i>Self-Control</i>	1.80 – 4.00	3.04	.388	-.472	1.195
<i>Social Interaction</i>	2.00 – 4.00	3.05	.579	-.184	-.955
Years of Stay in the U.S.	3 – 38	14.32	7.02	1.021	1.150

Note: The scoring of the items in the construct of parental warmth has been reversed so that higher scores indicate greater parental warmth.

### *Missing Data*

Having missing data is a common phenomenon in social studies, especially in longitudinal research. Because all the variables in this study were continuous variables, the Full Information Maximum Likelihood (FIML) technique, which is built in the *Mplus* program, was used to deal with the problem of missing data for the two samples (Muthen & Muthen, 2004). FIML handles missing data by making use of all available data to generate maximum likelihood-based statistics. In *Mplus*, this technique requires that the input data be raw data.

### *Structural Equation Modeling*

The two-step structural equation modeling (SEM) technique was employed to

examine the pathways of the influences on children's social development. SEM is a multivariate method which allows the estimation of effects from one construct to another within the context of an *a priori* specified model (Kline, 2005). This technique enables the examination of the causal effects of multiple factors on children's social outcomes. Specifically, with the measurement models, confirmatory factor analysis (CFA) was conducted to define and measure the constructs relating to children's development of social competence. The fit of the model was examined separately for both cultural groups. The structural models were examined to further investigate how children's social competence is developed by the effects of predictive variables such as parent-child communication and peer-oriented structured extracurricular activities. Moreover, for the Chinese immigrant subgroup the effect of years of stay in the U.S. was examined to understand whether Chinese immigrant mothers' parenting practices were influenced by the length of their stay in the United States. Finally, multiple-group comparisons were conducted to examine cultural differences in the pathways of social development between European American and Chinese American children. These analyses were conducted using *Mplus* version 5.10.

As noted earlier, the ECLS-K study systematically sampled children all over the United States. It is possible that some of the participants live in the same school districts and may consequently be influenced in some way. Therefore, the variable of *school district* in the spring semester of the kindergarten year was included in the analysis to control for any cluster effects. The Maximum Likelihood Robust (MLR) estimation was applied to handle the problem of dependency of data. The MLR approach estimates

parameters in a way that maximizes the possibility that the data were drawn from the population (Kline, 2005). The Lagrange Multiplier (LM) (also referred to as Modification Index) and Wald tests were utilized to obtain plausible measurement and structural models. The LM test examines the amount that the chi-square ( $\chi^2$ ) statistic of the model will decrease if a particular path is added in a model. The Wald test, on the other hand, examines the amount the  $\chi^2$  statistic of the model will increase if a particular path is dropped (Kline, 2005). The adjusted chi-square difference test with the Satorra-Bentler Scaled chi-square (Satorra & Bentler, 1994) was used to calculate chi-square difference tests between two nested models. If the  $\chi^2$  difference between two nested models is significant, the one with more parameters is preferred.

In order to examine the fit of the models to the data, the following common goodness-of-fit indices were used: the  $\chi^2$  statistic, the Comparative Fit Index (CFI; Bentler, 1990), the Root Mean Square Error of Approximation (RMSEA; Steiger & Lind, 1980), and the Standardized Root Mean Square Residual (SRMR; Bentler, 1995). CFI is commonly used in SEM analysis and assesses the relative improvement in fit of a modified model compared with its baseline model (Kline, 2005). Generally speaking, the CFI ranges from 0 to 1 and should be above .95 for a good-fitting model, although originally a value of .90 is considered acceptable (Hu & Bentler, 1999). The RMSEA index is a “badness-of-fit” measure, with a value of 0 indicating the best fit (Kline, 2005). A RMSEA value of .05 or lower is considered to be an indicator of a “good” fit, and a value of .08 or lower is considered to represent “acceptable” fit (McDonald & Ho, 2002). The SRMR measures the difference between the observed and predicted correlations, and



is presented in the form of the mean absolute correlation residual (Kline, 2005). A SRMR value of less than .08 indicates a good fitting model (Hu & Bentler, 1999). The joint criteria to retain a model, as suggested by Hu and Bentler (1999), were used:  $CFI \geq .96$  and  $SRMR \leq .10$ , or  $RMSEA \leq .06$  and  $SRMR \leq .10$ . Using these combinations of rules helps to minimize the risks of retaining the wrong model and rejecting the right model (Hu & Bentler, 1999).

### *The Measurement Model*

The measurement model is shown in Figure 3. The initial measurement model incorporated multiple constructs of parental warmth, parental SES, parent-child communication, peer-oriented structured extracurricular activities, and social competence. All latent variables and stand-alone measured variables were correlated with each other. The variance of each latent variable was set to be equal to 1 in order to set the scale. The fit of the model was examined separately in each cultural group. Respecifications were made based on the suggestions provided by the model modification indices when the initial model did not fit well. The value of 3.84 or greater for Modification Index (M.I.), which corresponds to alpha of .05 with 1 degree of freedom, was used to determine whether dropping a path would significantly decrease  $\chi^2$ . The final confirmatory factor model was determined when the LM test failed to recommend further model modifications. The goodness-of-fit information and inter-construct correlations were reported for both the European American and Chinese immigrant subgroups to evaluate whether the measurement model performed satisfactorily. Construct reliability of each latent variable was calculated after the final measurement model was fit to the data. It is

suggested that a Coefficient  $H$  value of greater than .70 is considered satisfactory (Hancock & Mueller, 2001).

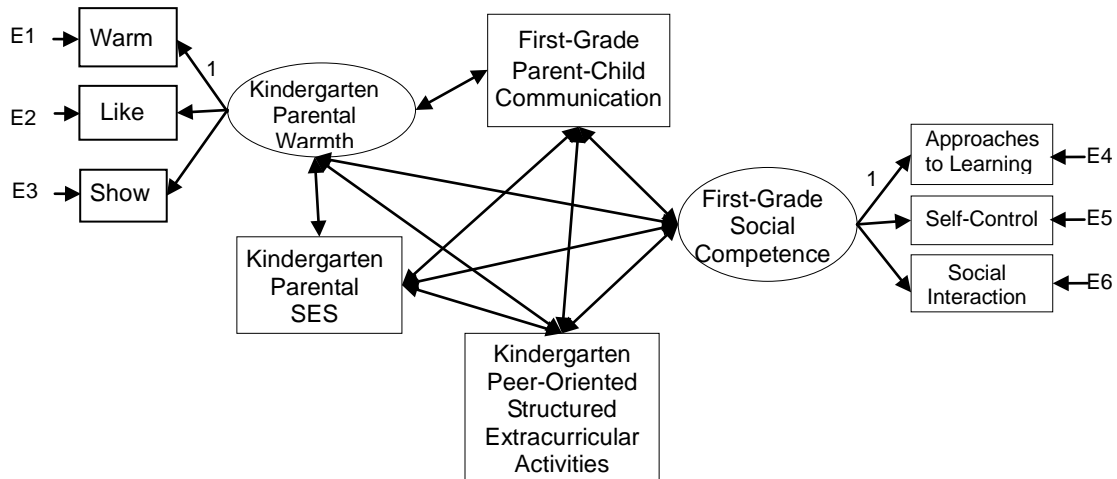


Figure 3. The measurement model.

### *The Structural Model*

The structural model is presented in Figure 4. Based on the final measurement model, the initial structural model was created to examine the causal effects among the study variables and to test research hypotheses. Specifically, the structural model attempted to test the following seven hypotheses: 1-1, 2-1, 3-1, 3-2, 4-1, 4-2, and 4-5. Moreover, in order to examine the indirect effects of parental warmth and SES on children's social competence, it is required to test their direct effects simultaneously. Two additional paths, from parental warmth and from parental SES to social competence, were then added into the model to examine their direct effects on the outcome variable.

The initial structural model was first tested for goodness-of-fit for both the European American and Chinese immigrant subgroups. The adjusted  $\Delta\chi^2$  test with the Satorra-Bentler scaled chi-square (Satorra & Bentler, 1994) was used to decide whether the removal of a path/parameter was feasible. Modifications guided by theory were made using the LM and Wald tests. The joint goodness-of-fit criteria, as suggested by Hu and Bentler (1999), were applied to evaluate the models. The final structural models for both cultural groups were established when the LM tests/modification indices failed to suggest further respecifications to the models. The direct and indirect effects of each construct on children's social competence were reported. Information regarding goodness-of-fit indices such as the values of  $\chi^2$ , CFI, and RMSEA for both cultural groups was also reported.

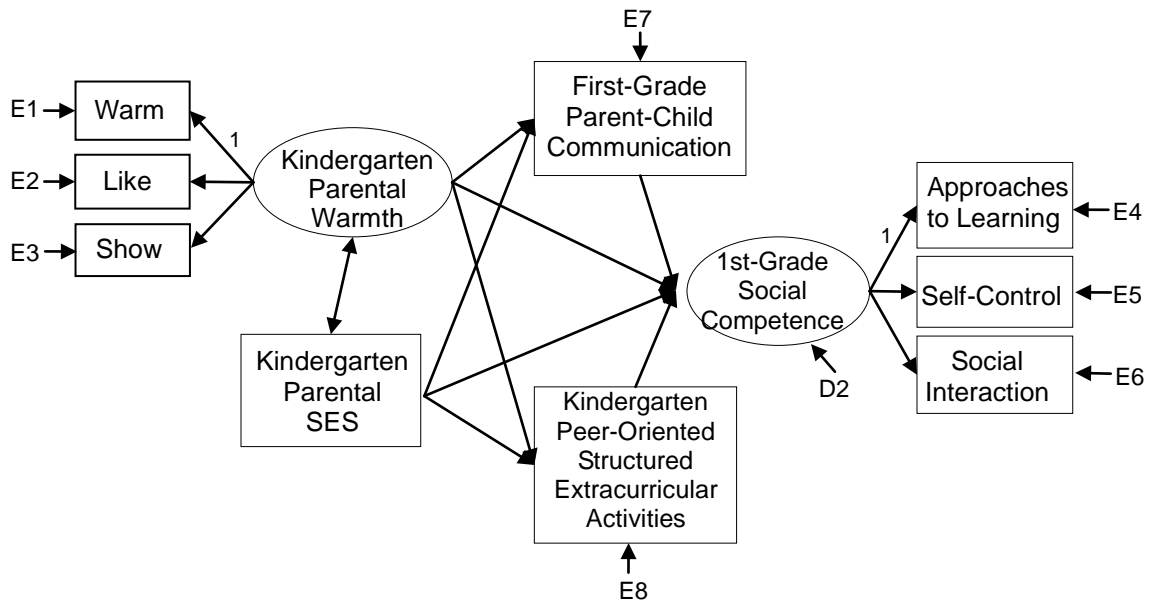


Figure 4. The structural model.

After the final structural model for the Chinese immigrant subgroup was determined, the variable of *years of stay in the U.S.* was added into the model to examine whether the length of time the parents have been living in the U.S. significantly influenced parental SES and parental warmth, parent-child communication, children's engagement in peer-oriented structured extracurricular activities, and children's social competence. Three paths and two covariates associated with *years of stay in the U.S.* were added. Specifically, three paths were added from *years of stay in the U.S.* to *parent-child communication*, *peer-oriented structured extracurricular activities*, and first-grade *social competence*. The two covariates added in the structural model were *years of stay in the U.S.* with both *parental warmth* and *parental SES*. The standardized estimates of the paths and covariates, the direct and indirect effects of the predictive factors, and the goodness-of-fit indices of the model were reported.

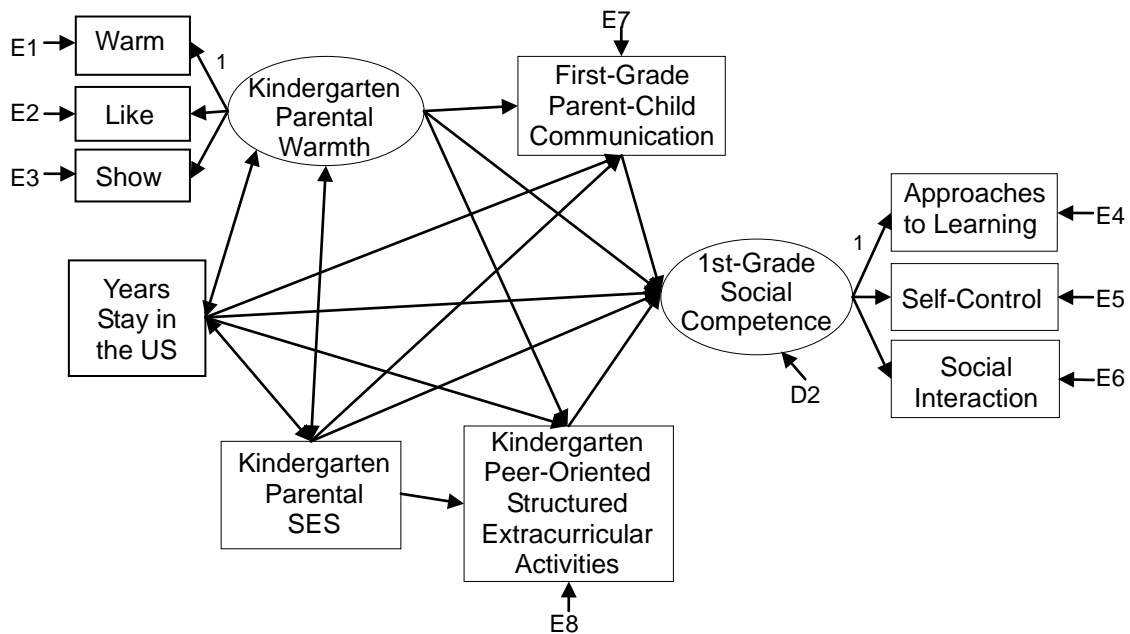


Figure 5. The structural model controlling for the effects of years of stay in the Chinese immigrant subgroup.

### Multiple-Group Analysis

In order to examine cultural differences in the development of children's social competence, a multiple-group analysis was conducted. The final structural models of both cultural groups were used to investigate whether the effects of the key variables on children's social development were invariant for European American and Chinese American children. This analysis aimed to test hypotheses 1-2, 2-2, 3-3, 3-4, and 4-6.

The multiple-group analysis began with generating the estimates of the paths and covariates in the model without setting constraints except for the construct of parental warmth, which had been tested for strong invariance. However, this freely estimated

model was not truly the baseline model because *Mplus* by default restricted the intercepts of the indicators of latent variables to be the same between the two groups. If the intercepts were set to be freely estimated, the whole model would be under-identified. Therefore, in this study, all the modified models were compared with the “quasi-baseline model.”

Next, except for the construct of parental warmth, the estimated parameters in the initial multiple-group structural model were constrained to be equal between the two cultural groups. This constrained model was compared with the quasi-baseline model. Because the two models were hierarchically related to each other, the adjusted  $\Delta\chi^2$  test with the Satorra-Bentler scaled chi-square (Satorra & Bentler, 1994) was applied to evaluate whether the two models were significantly different from each other. If so, the LM test/modification index were used to decide whether any path constraint should be released to improve the overall model fit. The paths and covariates estimates which appeared to differ between the two cultural groups were identified and estimated freely in each group. In addition, the structured means modeling was applied to compare the means of the latent variables in the models between groups. This procedure examined whether the two cultural groups differ significantly in the latent means of kindergarten parental warmth. The final multiple-group structural model was determined when the adjusted  $\Delta\chi^2$  test of the initial and current models was not statistically significant. The unstandardized estimates of the paths and covariates, the standardized direct and indirect effects of the predictive factors, and the goodness-of-fit indices of the models were reported.

### Qualitative Phase

The second part of this study applied a qualitative approach to further understand Chinese American children's social development. Qualitative investigation differs from a quantitative approach in that it can "obtain the intricate details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or learn about through more conventional research methods" (Strauss & Corbin, 1998, p.11). Another advantage of conducting qualitative research is that researchers can get detailed descriptions of events, individuals, and interactions, as well as direct quotations from informers regarding their attitudes, beliefs, and experiences (Patton, 1980). By collecting qualitative data from Chinese immigrant mothers, I was able to obtain a thorough understanding of children's experiences in their development of social competence. The aim of the qualitative investigation was to discover Chinese American children's unique experiences in social development. Given the findings in the quantitative analysis, a special focus was on the developmental pathways that differed between Chinese American and European American children.

### *Participants*

During the Fall semester of 2008 and the Spring semester of 2009, data were collected from the mothers of students in two local Chinese schools in an urban southwest city in the United States. One of them was established by a local Christian church and the other one was established by a Buddhist Association. First-generation Chinese immigrant mothers of children between 6 and 8 years of age were invited to participate in this study. Because of this criterion's small age range, the network sampling,

also called “snowball sampling” (Goodman, 1961), was also utilized to recruit as many mothers as possible. Following the suggestions made by Maykut and Morehouse (1994), at least 12 mothers were needed in order to achieve sufficiently representative data. A total number of 15 mothers were recruited to participate in the study since there was little new information gathered in the fifteenth interview.

### *Procedure*

Semi-structured one-on-one interviews were used to elicit in-depth information from the participants. Using a semi-structured interview enabled the researcher to probe and clarify the responses provided by the participants (Hutchinson & Skodol-Wilson, 1992). I scheduled the interviews by contacting the mothers either by phone or by email, asking for the time and place which was convenient for them. The participants were informed verbally and in writing about the purpose of the study and how the data would be used.

The mothers were asked to talk about their beliefs in children’s social competence and about their parenting practices to promote their child’s social development. The interview started with a list of open-ended questions on demographic information about the family, daily family interactions, and the child’s social life. The focus of inquiry then turned to the mothers’ perceptions of their relationships with their children, and their beliefs in the importance of parent-child communication and peer-oriented structured extracurricular activities in promoting children’s social development. They were also asked to report their experiences in and the degree to which they were involved in these parenting practices. A semi-structured interview protocol was used when conducting



interviews (see Appendix F). Utilizing a semi-structured interview protocol allowed me to further probe the mothers' responses for clarity and examples, and to obtain rich qualitative data from the interviews. In addition, after each interview, I wrote down observation notes and thoughts generated from the conversation. These field notes provided important contextual information about the home environment and atmosphere which may not have been specified by the mothers.

The interview with each mother lasted approximately 30 minutes to 2 hours. Five mothers whose interviews were comparatively short or needed more clarification were invited to a follow-up interview. The total amount of time for these mothers' interviews ranged from 45 minutes to 2 hours. All interviews were recorded using a digital recorder. Compared with cassette recording, digital recording makes it possible to easily store and organize the data on a computer. Before the interview began, the mothers were asked whether they felt comfortable with the conversation being recorded. The mothers decided whether they preferred to speak Chinese or English when they were interviewed. Each mother's interview was transcribed in the language used during the interviews for further analysis. Among the 15 interviews, 14 of the mothers chose to speak Chinese, and only 1 mother chose to speak English. The transcription process took place after the first three interviews were done, and continued throughout the data collection process. This strategy enabled me to recognize whether there was new information in the newly conducted interviews.

Each interview and its transcript were assigned a code number and the names of the mothers and related individuals mentioned in the interview (e.g., children, husband)

were changed to protect the participants' privacy. A code sheet which listed the mothers' names with their corresponding code numbers was created. This file was saved as a locked file on my computer for the duration of the study.

### *Data Analysis*

I applied the grounded theory in the analysis of the qualitative data. The social development of Chinese American children has not yet been widely investigated by researchers. From the grounded theory perspective, a researcher does not need to have a preconception of a theory in mind. Rather, the theory will emerge as data are systematically analyzed (Strauss & Corbin, 1998). Therefore, the results derived from the qualitative data are more likely to provide enhanced insights, and reflect the "reality" in the social context (Strauss & Corbin, 1998).

The interview transcripts were analyzed following the guidance of analytic procedures suggested by Strauss and Corbin (1998). The procedures of the grounded theory data analysis included three coding techniques: open, axial, and selective coding.

The first step of data analysis was open coding. Open coding refers to the analytic process of identifying concepts and developing categories in terms of their properties and dimensions from the data (Strauss & Corbin, 1998). At this analytic stage, the transcripts were broken down into separate parts and examined for their similarities and differences. Each interview transcript was closely examined and coded line by line. Any idea which seemed to stand out in the transcripts was identified. Some examples of the coding processes are shown in Table 4. The list of open codes was revised and verified as this process continued. Moreover, concepts which were similar in nature were grouped under

broader categories. The categories were defined in terms of their patterns and characteristics (i.e., properties) and the variations of the properties (i.e., dimensions). Table 5 shows some samples of open coding categories that emerged from the data. The codes across the transcripts were compared for similarities and differences to develop possible categories and subcategories. The transcripts were also coded by analyzing a whole sentence or paragraph to obtain major ideas in the whole section.

Table 4  
*Sample Open Coding Processes*

Interview Data	Open Codes
<p>Q: What do you think are your child's strengths when interacting with other children?</p> <p>A: I think he is a very <u>caring person</u>, so that's why he has a lot of friends, but he is also...yeah. He always <u>watches out for his friends</u>, like sometimes one thing I notice about him which I am very proud of is when...even boys, they gossip sometimes, when I am driving them to soccer practices, the boys in the back ...because we carpool, so they would be talking in the back, and I would be eavesdropping on them. So they were saying so-and-so doesn't play well, so-and-so doesn't... da-da-da...And <u>he actually would speak up for the friend and tell the others not to speak badly of other friends when they are not here</u>. So I think he makes friends that way. Because he's always like...<u>He always thinks of, you know, other people's good sides, and not so much of criticizing others</u>, so that's one good strength of him, I think that makes him [having] a lot of friends.</p>	<ul style="list-style-type: none"> <li>- caring</li> <li>- watch out for friends (speak up for friends)</li> <li>- think of other people's good sides</li> </ul>
<p>Q: Is there anything else that you have done to help your child establish good relationships with others?</p> <p>A: We always <u>invite friends over to play</u>, and that's about it. Like if they have...he has not really like... get caught into any disputes. <u>Sometimes his friends would say something that hurts him, but he won't really confront them. But he comes back and tells me, and then, you know we will pray together, and I will just tell him, you know, like what to say or what to do.</u> You know, yeah. When he was younger, <u>sometimes we do role play and say "OK, if this situation happens, what should you do?"</u> and so these. Yeah. So I think it helps him.</p>	<ul style="list-style-type: none"> <li>- arrange play day</li> <li>- pray with child</li> <li>- tell child what to say or to do</li> <li>- role play</li> </ul>

Table 5  
*Sample Open Coding Categories*

Categories	Properties	Dimensions
Mother's education	Mother's education level	Vocational school to Ph.D.
Language at home	The languages used at home	Mostly Chinese to mixed
Be a role model for the child	Mother acts as a role model for her child to follow	Positive to negative
Feel close to child	The degree to which mother feels close to her child	Very close to OK
Child talkative	Whether the child spontaneously talks about things to mother or mother needs to ask the child	Yes to No

The next step of the analysis was axial coding, which involves a process of systematically linking categories to their subcategories (Strauss & Corbin, 1998). A category usually represents a phenomenon, which can be an issue, an event, or a problem. A subcategory of a category may include information such as the time, place, reason, or consequence of the phenomenon. Strauss and Corbin (1998) noted that when conducting axial coding, researchers should link the category and subcategories at the conceptual rather than the descriptive level. At this level of data analysis, the properties and dimensions of categories are displayed and the conditions, actions or interactions, and consequences related to each phenomenon are identified. Then, the researcher will search for clues in the data that relate categories to their subcategories as well as to other relevant categories. For example, when it comes to examining how the Chinese immigrant mothers help their children solve problems with their friends through parent-child communication, the category (ways of communication) and subcategories

*(what to do next time, what not to do, consequences of behavior, explanations for others' behavior, and repeated correction)* across cases were identified to depict and explain the phenomena.

Selective coding was conducted to integrate and refine the theory (Strauss & Corbin, 1998). A central category which represented the main theme of the study was identified. A central category of a study usually evolves from the list of existing categories and encompasses the ideas of other categories. The storyline technique was used to develop a central category. Specifically, I wrote several sentences about the main ideas of the development of children's social competence to articulate my thoughts more clearly. When writing the storyline, I reviewed the interview transcripts, field notes, and research memos to recognize the main issues and the implicit meanings underlying the information provided by the mothers.

### *Trustworthiness*

In order to enhance the trustworthiness of the findings, several strategies were applied throughout the research process:

### *Credibility*

Strategies to ensure the credibility of this study's data included triangulation, peer debriefing, and member checking. Triangulation involves using information from multiple sources, methods, theories, and investigators (Denzin, 1978). The consistency of the findings was confirmed by existing literature, the qualitative data collected from the participants, and the field notes I created. As for peer debriefing, a fellow graduate student, who is knowledgeable about qualitative research, served as a peer debriefer and

collaborated with me throughout the data analysis process. The role of the peer debriefer is to help me explore meanings of the data and be aware of possible biases (Lincoln & Guba, 1985). In this study, the peer debriefer read the transcripts and provided critical comments about my interpretation of the data and rationales for theory-building. The peer debriefer also double-checked the translation of several interviews to ensure that the translated transcripts precisely presented the information provided by the Chinese immigrant mothers. In addition, to ensure the correctness of the interpretation of the data, member checking was conducted with some participants after the initial interviews. Four Chinese immigrant mothers were asked to take a follow-up interview to elaborate on their responses and clarify some ideas which appeared to be confusing in the first interview. This technique enabled me to evaluate the accuracy of the data and correct misunderstandings I had in the participants' responses (Lincoln & Guba, 1985).

### *Transferability*

Transferability can be understood as the appropriateness of the findings to be applied in other settings. According to Lincoln and Guba (1985), a detailed description of the contexts of the study is essential to allow other researchers to determine whether the research results can be generalized to other situations. To facilitate the transferability of this qualitative investigation, a detailed description of the contexts of the study environment and the characteristics of the participants was provided.

### *Dependability*

Dependability refers to the consistency of the findings derived from the data (Lincoln & Guba, 1985). In order to develop the dependability of the data in this study,

the peer debriefer acted as an inquiry auditor and examined both the processes and products of the data analysis. Specifically, the inquiry auditor carefully scrutinized the data, findings, and interpretations to ensure that the findings were supported by the qualitative data and that the whole study was internally coherent (Lincoln & Guba, 1985).

### *Confirmability*

The reflective journals and audit trail techniques were used to establish the confirmability of data. For example, the peer debriefer and I reviewed the reflective journals, field notes, and interview transcripts to make sure that the research findings were grounded in the data.



## CHAPTER FOUR

### RESULTS

In this chapter, I will report the findings of this study. Chapter four consists of two parts. In the first part, the quantitative phase, the cultural differences in the key variables and the associations between these variables will first be presented. Then, I will illustrate the measurement and structural models for both the European American and Chinese immigrant subgroups, and report the findings in the multiple-group analysis. Next, I will discuss the results for the research questions. In the second part, the qualitative phase, I will present the demographic background of the participants, and then report the main themes that emerge from the interview data.

#### Quantitative Phase

##### *Cultural Comparisons of Key Variables*

As noted earlier, parental SES, peer-oriented structured extracurricular activities, and parent-child communication were measured as observed variables. Parental warmth and social competence, on the other hand, were measured as latent variables. The three indicators of parental warmth were *warm*, *like*, and *show*. The indicators of social competence were *approaches to learning*, *self-control*, and *social interaction*.

Table 6 shows the cultural differences in the means of the key variables in the study. There was no significant difference in parental SES, *warm*, *like*, and *self-control* between the European American and Chinese immigrant subgroups. However, compared with their counterpart, European Americans had higher ratings on peer-oriented structured extracurricular activities ( $t = 5.70, p < .01$ ), parent-child communication ( $t =$

6.43,  $p < .01$ ), *show* ( $t = 2.61$ ,  $p < .05$ ), *approaches to learning* ( $t = 5.82$ ,  $p < .01$ ), and *social interaction* ( $t = 6.98$ ,  $p < .01$ ).

Table 6  
*Comparisons of Means and Standard Deviation for Key Variables*

Key Variables	Mean	
	Chinese Immigrant ( $N = 114$ )	European American ( $N = 170$ )
Parental SES	.46 (.92)	.33 (.73)
Peer-Oriented Structured Extracurricular Activities	.40* (.61)	.93* (.76)
Parental Warmth		
<i>Warm</i>	3.63 (.61)	3.72 (.53)
<i>Like</i>	3.66 (.61)	3.74 (.51)
<i>Show</i>	3.07* (.91)	3.35* (.76)
Parent-Child Communication	9.83* (1.68)	11.03* (1.35)
Social Competence		
<i>Approaches to Learning</i>	2.85* (.51)	3.20* (.46)
<i>Self-Control</i>	3.04 (.39)	3.04 (.47)
<i>Social Interaction</i>	3.05* (.58)	3.49* (.45)

Notes: The values of Parental SES in this study range from -1.56 to 2.12, with greater value indicating higher SES. The values of Peer-Oriented Structured Extracurricular Activities range from 0 to 3, where 0 indicates children's participation in no activity and 3 indicates children's participation in all three kinds of activities. The responses to Social Competence scale is a 4-point scale ranging from 1 = "student never exhibits this behavior" to 4 = "student exhibits this behavior most of the time." The values of Parent-Child Communication range from 5 to 12, where higher values represent greater levels of communication. The responses to Parental Warmth scale is a 4-point scale that corresponds to the following values: 1 = "completely true," 2 = "mostly true," 3 = "somewhat true," 4 = "not at all true." The scoring of *warm*, *like*, and *show* has been reversed so that higher scores indicate greater levels of parental warmth.

\*  $p < .05$

#### *Measures of Associations*

The correlation tables were generated by the *Mplus* program to demonstrate the

associations between the key variables for both groups (see Table 7). Parental SES was significantly correlated with peer-oriented structured extracurricular activities in both cultural groups ( $r = .28, p < .01$  for the European American subgroup and  $r = .64, p < .01$  for the Chinese immigrant subgroup). Parent-child communication was significantly and positively correlated with *warm* ( $r = .37, p < .01$ ), *show* ( $r = .25, p < .01$ ), *approaches to learning* ( $r = .40, p < .01$ ), and *social interaction* ( $r = .23, p < .01$ ) in the European American subgroup, and was positively correlated with *approaches to learning* ( $r = .38, p < .01$ ) and *self-control* ( $r = .30, p < .01$ ) in the Chinese immigrant subgroup. Peer-oriented structured extracurricular activities was found to be positively correlated with *warm* ( $r = .24, p < .01$ ), *approaches to learning* ( $r = .26, p < .01$ ), and *social interaction* ( $r = .55, p < .01$ ) in the Chinese immigrant subgroup.

The indicators of parental warmth were significantly and positively correlated with each other in both the European American and Chinese immigrant subgroups ( $r$ s ranged from .29 to .52 and from .24 to .56, respectively). As for the associations between the indicators of social competence, the three measured variables were significantly and positively correlated with each other ( $r$ s ranged from .18 to .39) in the European American subgroup. However, only *approaches to learning* and *self-control* were positively and significantly correlated with each other in the Chinese immigrant subgroup ( $r = .31, p < .01$ ).

In addition, parental warmth and social competence in general were found to be positively correlated. Specifically, in the European American subgroup, *warm* was positively related to *approaches to learning* ( $r = .16, p < .05$ ) and *self-control* ( $r = .16, p$

$< .05$ ); *like* was positively correlated with *self-control* ( $r = .23, p < .01$ ) and *social interaction* ( $r = .31, p < .01$ ); and *show* was positively correlated with *approaches to learning* ( $r = .23, p < .01$ ) and *self-control* ( $r = .21, p < .01$ ). In the Chinese immigrant subgroup, on the other hand, *warm* was positively correlated with *social interaction* ( $r = .12, p < .01$ ); *like* was positively correlated with *approaches to learning* ( $r = .30, p < .05$ ); and *show* was positively correlated with *social interaction* ( $r = .16, p < .01$ ).

Table 7

*Correlations between Parental SES, Parental Warmth, Parent-Child Communication, Peer-Oriented Structured Extracurricular Activities, and Social Competence*

Observed Variable	1	2	3	4	5	6	7	8	9	Mean	SD
1. Parental SES	—	-.14	.64**	.12	.03	.10	.30**	.00	.78**	.33	.73
2. Parent-Child Communication	-.05	—	-.11	.08	.13	-.12	.38**	.30**	-.37	11.03	1.35
3. Extracurricular Activities	.28**	.08	—	.24**	.18	.09	.26**	-.02	.55**	.93	.76
4. Parental Warmth – <i>warm</i>	-.02	.37**	.14	—	.56**	.36**	.22	-.13	.12**	3.72	.53
5. Parental Warmth – <i>like</i>	.07	.17	.05	.52**	—	.24**	.30*	-.03	-.03	3.74	.51
6. Parental Warmth – <i>show</i>	-.15	.25**	-.06	.29**	.31**	—	.11	-.15	.16**	3.35	.76
7. Approaches to Learning	.04	.40**	.10	.16*	.12	.23**	—	.31**	.14	3.20	.46
8. Self-Control	.16	.13	.00	.16*	.23**	.21**	.18*	—	-.12	3.04	.47
9. Social Interaction	.08	.23**	.05	.11	.31**	.11	.39**	.18*	—	3.49	.45
Mean	.46	9.83	.40	3.63	3.66	3.07	2.85	3.04	3.05		
SD	.92	1.68	.61	.61	.61	.91	.51	.39	.58		

Note: The matrix for the European American subgroup is shown below the diagonal. The Chinese immigrant matrix is shown above the diagonal.

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

### *The Measurement Models*

The measurement model was first assessed for both the European American and Chinese immigrant subgroups. All the latent variables and stand-alone measured variables were set to be correlated with each other. The measurement model included two latent variables, six factor loadings, ten factor correlations, and six variances for measurement errors. Respecifications of the initial measurement model were made for both cultural groups based on the suggestions provided by the LM tests/model modification indices and theory.

The measurement model for the European American subgroup is shown in Figure 6. The goodness-of-fit indices did not indicate a good fit of the model except for the SRMR (CFI = .82, RMSEA = .096, SRMR = .063). The LM tests/model modification indices suggested that *warm* and *show* residuals should covary. This modification, however, was not made because adding this covariance caused the residual variance of *warm* to be negative. The initial measurement model was then used to examine the structural model, although the values of the fit indices were not satisfactory. The value of the coefficient *H* for social competence was .63, which was slightly lower than the suggested value of .70. The value of coefficient *H* for parental warmth was .74, indicating that the construct reliability of this latent variable was adequate.

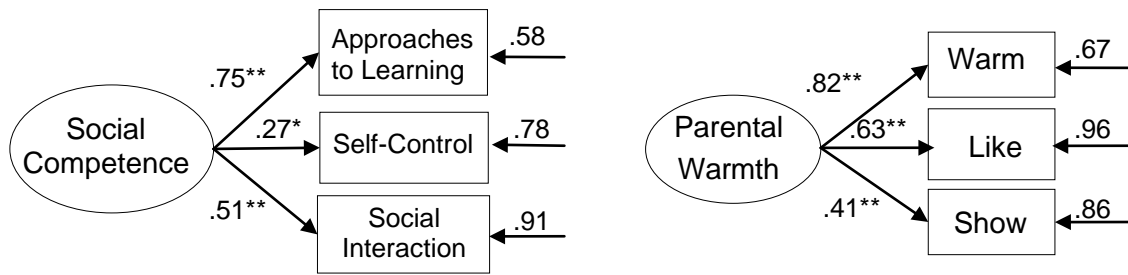


Figure 6. Measurement model for the European American subgroup (standardized).

\* $p < .05$ . \*\* $p < .01$

Figure 7 shows the measurement model for the Chinese immigrant subgroup. The goodness-of-fit indices for the initial measurement model yielded a CFI of .92, RMSEA of .16, and SRMR of .11. These values did not indicate good model fit. The LM tests/model modification indices suggested that the residuals of *approaches to learning* and *social interaction* be allowed to covary with each other. Since these two measured variables theoretically were also related to each other, this covariance was then added into the model. The values of the goodness-of-fit indices of this modified model were improved (CFI = .95, RMSEA = .13, SRMR = .10,  $p < .05$ ). Although the goodness-of-fit indices did not meet the joint criteria of fitness evaluation, they were very close to the suggested values. The coefficient  $H$  values of social competence and parental warmth were both satisfactory ( $H = .83$  and  $.87$ , respectively).

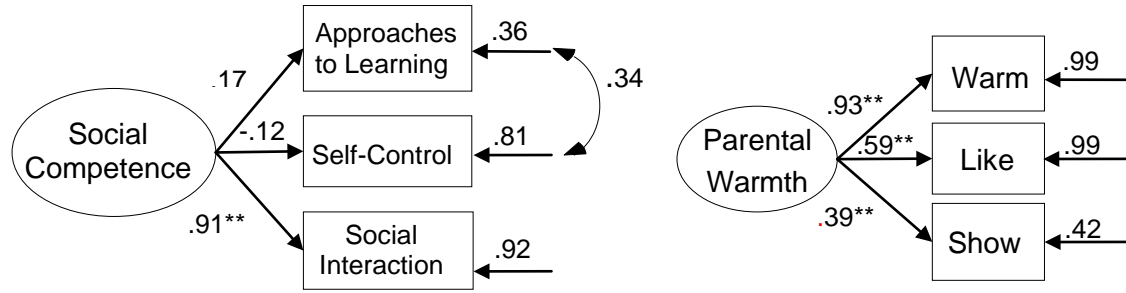


Figure 7. Measurement model for the Chinese immigrant subgroup (standardized).

Note: \* $p < .05$ . \*\* $p < .01$ .

### *The Structural Models*

The initial structural models for both the European American and Chinese immigrant subgroups were created based on their final measurement models.

Respecifications were made according to the suggestions presented by the LM tests/model modification indices and theory.

#### *The Structural Model for the European American Subgroup*

The fit statistics of the model for the European American subgroup is shown in Table 8. The goodness-of-fit indices of the initial structural model did not indicate a good model fit ( $\chi^2(21) = 51.161$ ,  $p < .05$ ; CFI = .82, RMSEA = .09, SRMR = .06), which would be expected given the inadequate fit of the measurement model. The LM tests/model modification indices suggested that adding a covariance between the residuals of *warm* and *show* would statistically decrease the value of its  $\chi^2$ . Again, this suggestion was ignored because adding it caused the residual variance of *show* to be negative in the revised model. Besides this modification suggestion, no other plausible



suggestion was provided by the LM tests/model modification indices. Thus, the initial structural model was the final structural model.

Table 8  
*Fit Statistics for Models for the European American Subgroup (N = 170)*

Model	$\chi^2$	df	p	CFI	RMSEA	SRMR
Initial and Final Measurement Model	51.533	20		.82	.096	.063
Initial and Final Structural Model	51.161	21	< .01	.82	.092	.063

The standardized final structural model for the European American subgroup is shown in Figure 8. In the final structural model, parental warmth was only found to positively predict parent-child communication ( $\beta = .43, p < .01$ ), which in turn predicted children's social competence ( $\beta = .46, p < .01$ ). Parental SES only positively predicted children's engagement in peer-oriented structured extracurricular activities ( $\beta = .29, p < .01$ ). Children's engagement in peer-oriented structured extracurricular activities, however, did not predict children's social competence ( $\beta = .03, p > .05$ ). Parental warmth and parental SES were not significantly correlated ( $r = -.02, p > .05$ ). The factor loadings of the constructs of parental warmth and social competence were acceptable and statistically significant.

The standardized direct, indirect, and total effects of the key variables on children's social competence are shown in Table 9. The total effect of parental warmth on social competence was .34, which was a medium effect, with a nonsignificant direct

effect of .14 and a significant indirect effect of .20. The direct effect of parent-child communication on children's social competence was .46, which was also a medium effect. The total effects of parental SES and peer-oriented structured extracurricular activities on children's social competence were .11 and .03 respectively. Neither of them was statistically significant.

Table 9  
*Standardized Direct, Indirect, and Total Effects of Key Variables on Social Competence in the European American Subgroup (N = 170)*

Variable	Direct Effect	Indirect Effect	Total Effect
Parental Warmth	.14	.20*	.34*
Parental SES	.12	-.01	.11
Parent-Child Communication	.46*	--	.46*
Peer-Oriented Structured Extracurricular Activities	.03	--	.03

Note: \* $p < .05$

#### *The Structural Model for the Chinese Immigrant Subgroup*

Table 10 shows the fit statistics of the measurement and structural models for the Chinese immigrant subgroup. Based on the joint criteria of model fit evaluation suggested by Hu and Bentler (1999), the initial structural model was not supported by the data ( $\chi^2(20) = 57.768, p < .05$ ; CFI = .95, RMSEA = .13, SRMR = .10). Nevertheless, the values of CFI and SRMR were very close to the cutoff criteria, and the model was not statistically different from the final measurement model. No other reasonable model modification was suggested. The standardized structural model without controlling for

the variable of years of stay in the U.S. for the Chinese immigrant subgroup is shown in Figure 9.

The variable of years of stay in the U.S. was added into the model after the LM test was conducted for the structural model. Two covariates (years of stay in the U.S. with both parental warmth and parental SES) and three paths (from years of stay in the U.S. to parent-child communication, peer-oriented structured extracurricular activities, and social competence) were added into the model. This new structural model, however, did not converge because the range of years of stay in the U.S. was much larger than other measured variables (ranging from 3 to 38). To solve this problem, the Z-score of the variable of years of stay in the U.S. was applied. The goodness-of-fit indices overall did not suggest a good model fit ( $\chi^2(24) = 53.291, p < .05$ ; CFI = .90, RMSEA = .10, SRMR = .08). However, the LM tests/model modification indices of the revised model did not suggest any other plausible modification. This model, therefore, served as the final structural model for the Chinese immigrant subgroup since there was also no other plausible modification based on the theory. The standardized structural model with the variable of years of stay in the U.S. for the Chinese immigrant subgroup is shown in Figure 10.

Table 10

*Fit Statistics for Models for the Chinese Immigrant Subgroup (N = 114)*

Model	$\chi^2$	df	p	AIC	BIC	CFI	RMSEA	SRMR
Initial Measurement	76.014	20	--	2039.21	2131.94	.92	.157	.111
Final Measurement	56.878	19	< .01	2028.84	2124.30	.95	.133	.101
Initial Structural (without Years of Stay in the U.S.)	57.768	20	.56	2699.90	2083.39	.95	.129	.101
Final Structural (with Years of Stay in the U.S.)	53.291	24	--	2724.46	2836.28	.90	.104	.077

*Differences between the Initial and Final Structural Models for the Chinese Immigrant Subgroup*

In the initial structural model (Figure 9), without controlling for years of stay in the U.S., parental warmth only positively predicted children's engagement in peer-oriented structured extracurricular activities ( $\beta = .17, p < .05$ ). Parental SES positively and strongly predicted Chinese American children's engagement in peer-oriented structured extracurricular activities ( $\beta = .62, p < .01$ ) and their social competence ( $\beta = .77, p < .01$ ). Neither parental warmth nor parental SES predicted parent-child communication in the family ( $\beta = .12, p > .05$  and  $\beta = -.16, p > .05$ , respectively). Parent-child communication negatively predicted children's social competence ( $\beta = -.28, p < .01$ ). Children's engagement in peer-oriented structured extracurricular activities, on the other hand, did not predict their social competence ( $\beta = .08, p > .05$ ). Parental warmth was positively correlated with parental SES ( $r = .13, p < .05$ ). The factor loadings of the construct of parental warmth were adequate and

statistically significant. However, the factor loadings of *approaches to learning* and *self-control* in the construct of social competence were not statistically significant ( $\lambda = .17, p > .05$  and  $\lambda = -.12, p > .05$ , respectively).

After the construct of years of stay in the U.S. was added in the structural model, the parameter estimates of the final structural model changed considerably (see Figure 10). The final structural model, controlling for years of stay in the U.S., showed that parental SES positively predicted parent-child communication ( $\beta = .39, p < .01$ ), peer-oriented structured extracurricular activities ( $\beta = .39, p < .01$ ), and social competence ( $\beta = .38, p < .01$ ). Parental warmth, in contrast, did not predict any of the dependent variables. Parent-child communication positively predicted children's social competence ( $\beta = .33, p < .01$ ), while peer-oriented structured extracurricular activities failed to predict this outcome variable ( $\beta = .16, p > .05$ ). Parental warmth and parental SES were not significantly correlated with each other ( $r = .20, p > .05$ ). The factor loadings of both parental warmth and social competence were adequate and statistically significant.

In sum, the initial structural model for the Chinese immigrant subgroup showed that parental warmth and parental SES were positively correlated. Parental warmth positively predicted children's engagement in peer-oriented structured extracurricular activities. Also, parental SES positively predicted children's extracurricular activities and social competence. Parent-child communication, however, negatively predicted children's social competence. After controlling for years of stay in the U.S., the results of several parameters in the new structural model had changed. First, parental warmth was not

correlated with parental SES anymore. Second, parental warmth no longer predicted children's engagement in peer-oriented structured extracurricular activities. Third, parental SES positively predicted parent-child communication. Fourth, the path from parent-child communication to social competence changed from negative to positive.

*The Effects of Years of Stay in the U.S.*

The final structural model suggested that years of stay in the U.S. did not predict Chinese American children's social competence ( $\beta = -.25, p > .05$ ). Years of stay in the U.S. positively predicted children's engagement in peer-oriented structured extracurricular activities ( $\beta = .40, p < .01$ ), while it negatively predicted parent-child communication in the family ( $\beta = -.54, p < .05$ ). Moreover, years of stay in the U.S. was positively correlated with Parental SES ( $r = .38, p < .05$ ), whereas it was not significantly associated with parental warmth ( $r = .10, p > .05$ ).

The standardized direct, indirect, and total effects of the key variables on children's social competence are shown in Table 11. The total effect of parental SES on children's social competence was .58, which was a large effect, with a significant direct effect of .38 and a nonsignificant indirect effect of .19. The direct effect of parent-child communication on social competence was .33, which was a statistically significant medium effect. The total effects of parental warmth, peer-oriented structured extracurricular activities, and years of stay in the U.S. on children's social competence, however, were not statistically significant (.22, .16, and -.25, respectively).

Table 11

*Standardized Direct, Indirect, and Total Effects of Key Variables on Social Competence in the Chinese Immigrant Subgroup (N = 114)*

Variable	Direct Effect	Indirect Effect	Total Effect
Parental Warmth	.16	.06	.22
Parental SES	.38*	.19	.58*
Parent-Child Communication	.33*	--	.33*
Peer-Oriented Structured Extracurricular Activities	.16	--	.16
Years of Stay in the U.S.	-.25	--	-.25

Note: \* $p < .05$

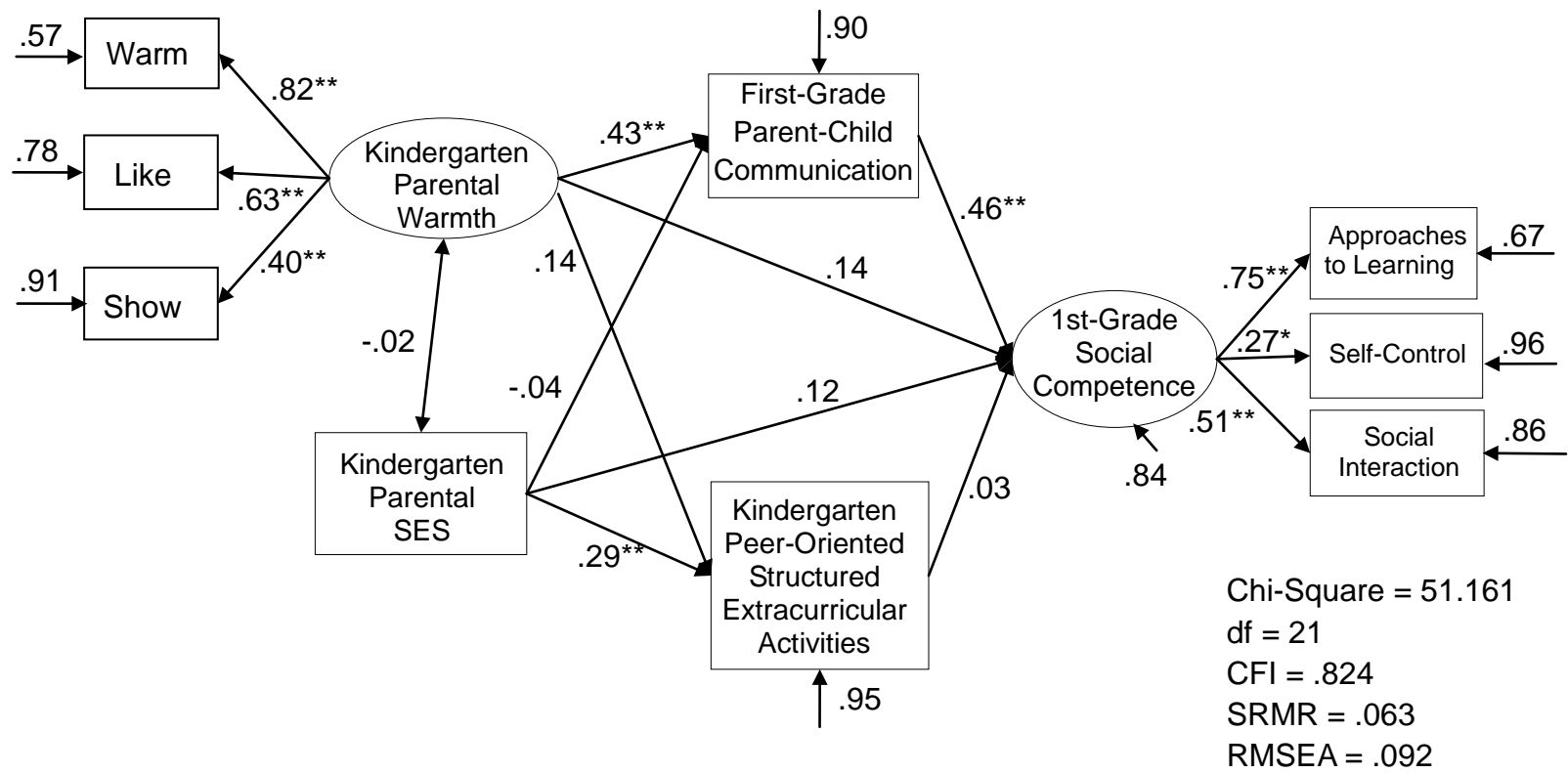


Figure 8. Final structural model for the European American subgroup (standardized).

Note: \* $p < .05$ . \*\* $p < .01$ .



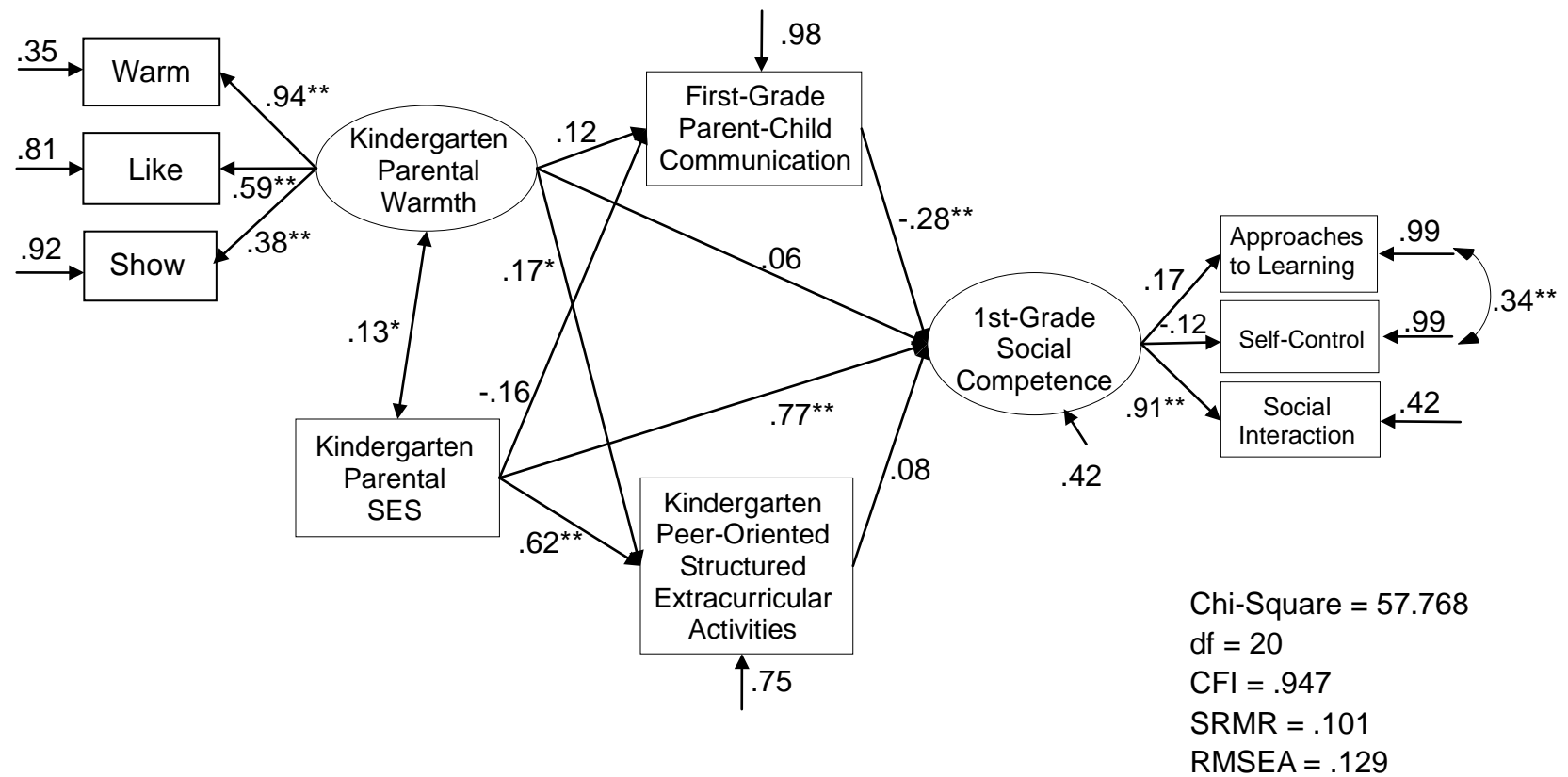


Figure 9. Final structural model for the Chinese immigrant subgroup (standardized).

Note: \* $p < .05$ . \*\* $p < .01$ .

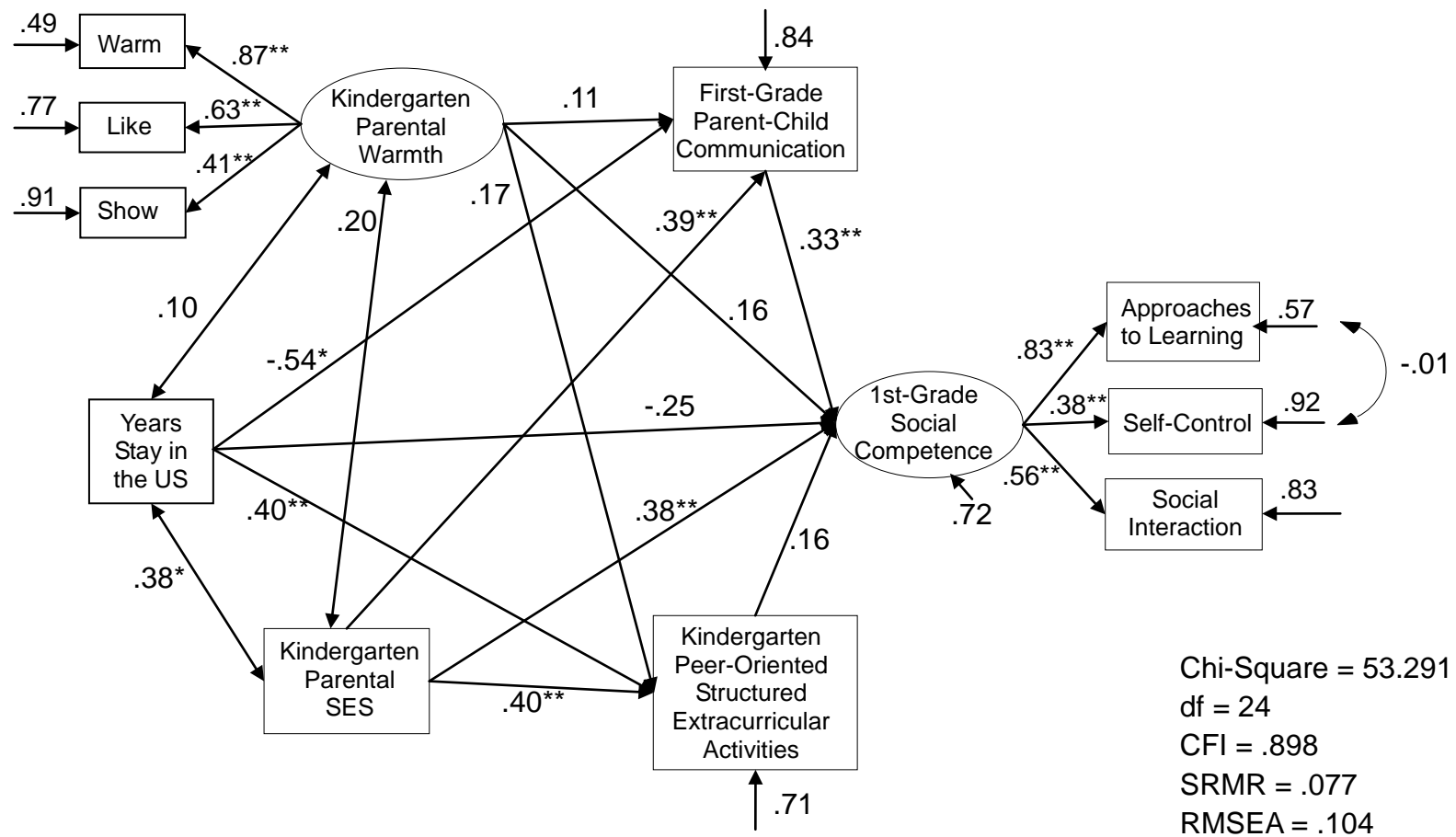


Figure 10. The structural model controlling for years of stay in the U.S. in the Chinese immigrant subgroup (standardized).

Note:  $*p < .05$ .  $**p < .01$ .

### *Multiple-Group Analysis*

In *Mplus* it is required that the variables in the models should be identical when conducting multiple-group analysis. Therefore, the variable of years of stay in the U.S. in the Chinese immigrant subgroup could not be included in the analysis because this variable was not available in the European American subgroup. Moreover, the test of strong invariance for parental warmth had been examined for both cultural groups. As a result, the paths (factor loadings) relating to parental warmth were not tested for group differences.

The first step of multiple-group analysis was to generate the estimates of the paths and covariates of the structural model without setting any constraints. However, *Mplus* by default restricted the intercepts of the indicators of latent variables to be identical between groups, and releasing the intercepts would cause the model to be under-identified. The “quasi-baseline model” with the intercepts restricted, therefore, was used to compare with the subsequent modified models. Table 12 shows the fit statistics for the multiple-group structural models. The goodness-of-fit indices of the initial structural model without constraints was not supported by the data ( $\chi^2(44) = 71.716$ ,  $p < .05$ ; CFI = .91, RMSEA = .07, SRMR = .07). However, the values were not far from the joint criteria of RMSEA  $\leq$  .06 and SRMR  $\leq$  .10, as suggested by Hu & Bentler (1999).

Then, all the estimated parameters in the initial structural model except for the construct of parental warmth were constrained to be the same between the two cultural groups. This constrained structural model did not have a good model fit ( $\chi^2(61) = 143.952$ ,  $p < .05$ ; CFI = .74, RMSEA = .10, SRMR = .12). The LM tests/model modification

indices suggested that the intercept of *social interaction* for the construct of social competence should be released. Both the factor loading and intercept of *social interaction* were then released to be estimated separately in both groups. The values of the goodness-of-fit indices of this modified model (Released Model 1) were slightly improved, although they were still significantly different from the initial structural model ( $\chi^2(58) = 111.190, p < .05$ ; CFI = .83, RMSEA = .08, SRMR = .11). The LM tests/model modification indices of this model suggested that the path from parental SES to parent-child communication should be freely estimated in both groups. Therefore, this path was set to be estimated separately.

The new modified model (Released Model 2) improved in terms of model fit, although it was still not satisfactory ( $\chi^2(56) = 90.821, p < .05$ ; CFI = .89, RMSEA = .07, SRMR = .09). In this model, the factor loadings and intercepts of the construct of social competence, covariance between parental warmth and parental SES, and structural paths were set to be the same between the two groups. The LM tests/model modification indices suggested that the path from parental warmth to parent-child communication should be estimated freely in both cultural groups. This path was then released and the modified model was re-estimated (Released Model 3). The goodness-of-fit indices suggested that this model was supported by the data ( $\chi^2(55) = 84.643, p < .05$ ; CFI = .91, RMSEA = .06, SRMR = .09). The LM tests/model modification indices did not provide further plausible respecification suggestions. This model then became the final multiple-group structural model. The unstandardized final structural model is shown in Figure 11.

Table 12

*Fit Statistics for the Multiple-Group Models (N = 170 for the European American Subgroup; N = 114 for the Chinese Immigrant Subgroup; N = 284 for Both Groups)*

Model	$\chi^2$	df	p	CFI	RMSEA	SRMR
Initial Structural Model	71.716	44	--	.913	.067	.071
Constrained Structural Model	143.952	61	< .01	.741	.098	.124
Released Model 1	111.190	58	< .01	.834	.081	.108
Released Model 2	90.821	56	.09	.891	.066	.093
Released Model 3 (Final)	84.643	55	.28	.907	.062	.086

Figure 11 shows the cultural differences in the paths and covariances of the multiple-group structural model. The unstandardized model suggested that there were cultural differences in the effects of parental warmth and parental SES on parent-child communication. As for the cultural differences in the factor loadings of the latent variables, *show* in the construct of parental warmth and *social interaction* in the construct of social competence were found to be noninvariant between the two groups. There were no cultural differences in the effects of parental warmth, parental SES, parent-child communication, and peer-oriented structured extracurricular activities on children's social competence. Moreover, there were no cultural differences in the effect of parental warmth on peer-oriented structured extracurricular activities. There was also no association between parental warmth and parental SES. The latent mean of parental warmth also did not differ between the two cultural groups.

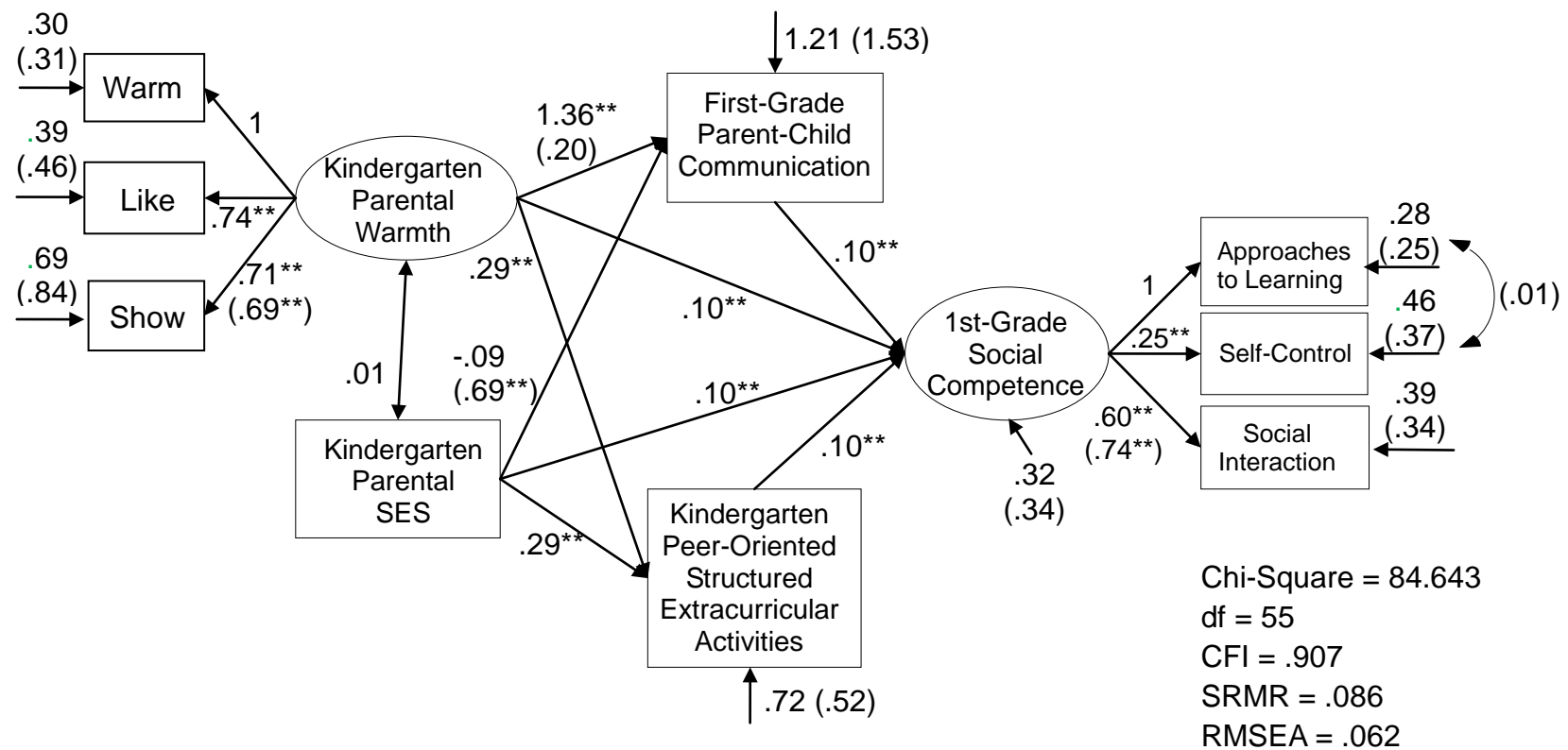


Figure 11. Multiple-group comparison - Final model for the European American and Chinese immigrant subgroups (unstandardized).

Note: Values enclosed in parentheses represent the unstandardized estimates for the Chinese immigrant subgroup.

### *Results for the Research Questions*

*Research Question 1-1:* Does parent-child communication predict children's social competence?

I hypothesized that parent-child communication increases children's social competence. According to the structural models, greater parent-child communication predicted better social competence for both the European American ( $\beta = .46, p < .01$ ) and Chinese American ( $\beta = .33, p < .01$ ) children.

*Research Question 2-1:* Does children's engagement in peer-oriented structured extracurricular activities predict their social competence?

In this study, children's engagement in peer-oriented structured extracurricular activities was hypothesized to promote their development of social competence. This hypothesis, however, was not supported by the data. Engagement in peer-oriented structured extracurricular activities failed to predict both European American ( $\beta = .03, p > .05$ ) and Chinese American ( $\beta = .16, p > .05$ ) children's social competence.

*Research Question 3-1:* Does parental warmth predict the level of parent-child communication in the family?

It was hypothesized that higher parental warmth leads to greater parent-child communication in the family. The hypothesis was partially supported by the data. Specifically, the structural models suggested that this link existed in the European American families ( $\beta = .43, p < .01$ ), but not in the Chinese immigrant families ( $\beta = .11, p > .05$ ).

*Research Question 3-2:* Does parental warmth predict children's engagement in

peer-oriented structured extracurricular activities?

I hypothesized that higher levels of parental warmth increase children's engagement in peer-oriented structured extracurricular activities. However, the structural models indicated that parental warmth did not predict children's social competence for either cultural group (European American children:  $\beta = .14, p > .05$ ; Chinese American children:  $\beta = .17, p > .05$ ).

*Research Question 4-1:* Does parental SES predict parent-child communication?

In this study, parental SES was hypothesized to foster parent-child communication in the family. This hypothesis, however, was only supported for the Chinese American children ( $\beta = .39, p < .01$ ). For the European American children, the level of communication with their parents was not influenced by their parents' SES ( $\beta = -.04, p > .05$ ).

*Research Question 4-2:* Does parental SES predict children's engagement in peer-oriented structured extracurricular activities?

I hypothesized that higher parental SES promotes children's engagement in peer-oriented structured extracurricular activities. According to the structural models, parental SES positively predicted both the European American ( $\beta = .29, p < .01$ ) and Chinese American ( $\beta = .40, p < .01$ ) children's engagement in such activities.

*Research Question 4-5:* How does parental SES relate to parental warmth?

Parental SES was hypothesized to be positively correlated with parental warmth, although this hypothesis was exploratory. The structural models showed that there were no significant associations between these two variables for either cultural groups



(European American children:  $r = -.02$ ,  $p > .05$ ; Chinese American children:  $r = .20$ ,  $p > .05$ ).

To answer the research questions regarding cultural differences in the effects of the key variables on children's social development, the unstandardized multiple-group model (Figure 11) was used to report the parameter estimates.

*Research Question 1-2:* Does the effect of parent-child communication on children's social competence differ between Chinese American and European American children?

It was hypothesized that the influence of parent-child communication on the development of social competence would be greater for the European American children than for the Chinese American children. The structural model of the multiple-group analysis indicated that this effect did not differ between the two cultural groups ( $\beta = .10$ ,  $p < .01$ ).

*Research Question 2-2:* Does the effect of children's engagement in peer-oriented structured extracurricular activities on their social competence differ between Chinese American and European American children?

I hypothesized that the influence of peer-oriented structured extracurricular activities on the development of social competence would be different between European American and Chinese American children. However, according to the structural model, there was no difference in the effects of peer-oriented structured extracurricular activities on children's social competence between the two cultural groups ( $\beta = .10$ ,  $p < .01$ ).

*Research Question 3-3:* Does the effect of parental warmth on parent-child communication differ between European American and Chinese immigrant families?

I hypothesized that the influence of parental warmth on parent-child communication would be greater for European American children than for Chinese American children. This hypothesis was supported by the data. Parental warmth was found to promote parent-child communication in the European American families ( $\beta = 1.36, p < .01$ ), while this effect was not observed in the Chinese immigrant families ( $\beta = .20, p > .05$ ).

*Research Question 3-4:* Does the effect of parental warmth on children's engagement in peer-oriented structured extracurricular activities differ between Chinese American and European American children?

I hypothesized that the influence of parental warmth on children's engagement in peer-oriented structured extracurricular activities would differ between European American and Chinese immigrant families. Based on multiple-group analysis, however, there was no cultural difference for this effect between the two cultural groups ( $\beta = .29, p < .01$ ).

*Research Question 4-3:* Does the effect of parental SES on parent-child communication differ between European American and Chinese immigrant families?

No hypothesis was made for this research question because there is a lack of literature regarding this issue. This examination was exploratory. The multiple-group analysis showed that the effect of parental SES on parent-child communication was greater in the Chinese immigrant families than in the European American families. Specifically, this path was strong for the Chinese American children ( $\beta = .69, p < .01$ ), while it was not statistically significant for the European American children ( $\beta = -.09, p$

> .05).

*Research Question 4-4:* Does the effect of parental SES on children's engagement in peer-oriented structured extracurricular activities differ between European American and Chinese immigrant families?

Since there has been little research on cultural differences with respect to the effect of parental SES on children's engagement in peer-oriented structured extracurricular activities, no hypothesis was made for this research question. The results of the multiple-group analysis suggested that there were no differences in this effect between the two cultural groups ( $\beta = .29, p < .01$ ).

*Research Question 4-6:* Does the relationship between parental SES and warmth differ between European American and Chinese immigrant families?

I hypothesized that the association between parental SES and parental warmth would not differ between European American and Chinese immigrant families. The results of the multiple-group analysis suggested that this hypothesis was supported by the data ( $r = .01, p > .05$ ).

### Qualitative Phase

The following paragraph depicts the life experiences of Chinese American children in a regular day. The descriptions are derived from the findings in the qualitative data of this study and are informative in understanding Chinese American children's social development.

In the morning of a regular school day, Chinese immigrant mothers get up early and prepare breakfast for their children. Before their children go to school, the mothers

hug them and remind them of what they should do in school. When the children finish the classes at school, some of them go to an afterschool program (in which they can participate in extracurricular activities), while others are picked up by their parents and sent to an extracurricular program. At dinner time, all the family members share their day with each other at the dining table. The mothers ask their children how they are doing at school and give them advice or suggestions if the children are having any problems.

In this part of study, I sought to further explore the significant findings of the quantitative study. Specifically, I found that parental SES predicted parent-child communication in the Chinese immigrant families and children's engagement in peer-oriented structured extracurricular activities. Parent-child communication predicted Chinese American children's social competence. Years of stay in the U.S. positively predicted Chinese American children's participation in peer-oriented structured extracurricular activities, whereas it negatively predicted parent-child communication at home. Years of stay in the U.S. was also positively correlated with parental SES. Moreover, there was a cultural difference in *show* in the construct of parental warmth. I therefore asked the Chinese immigrant mothers to describe how they facilitate their children's social development in their daily interactions with their children.

The objectives of this qualitative investigation were to understand (1) the cultural characteristics of parental warmth in Chinese immigrant families; (2) how parent-child communication influences Chinese American children's social competence; and (3) how parental SES influences Chinese American children's engagement in peer-oriented structured extracurricular activities and the levels of parent-child communication in the

home. Additionally, I also explored the effect of years of stay in the U.S. on Chinese immigrant mothers' parenting practices.

The qualitative phase consists of two sections. The first section provides an overall description of the study contexts. It includes information from the interviews with the Chinese immigrant mothers and my fieldnotes. The second section reports the main themes that emerged from the interview data.

### *Demographic Description of Participants*

Demographic information was collected from each Chinese immigrant mother during the interview. The demographic data included maternal age, education level, occupation, years of stay in the United States, number of children, and their religious orientation (see Table 13). As noted earlier, 15 Chinese immigrant mothers participated in this study. However, one of the interviews was excluded from the analysis because of the poor quality of the data. The mother explained that because she was very busy with work, she had few chances to interact with her child. As a result, very little information was gathered from the interview.

All the Chinese immigrant mothers reported that their SES is average or above. Among the 14 mothers, 5 were from China, 8 were from Taiwan, and 1 was from Hong Kong. The ages of the mothers ranged from 35 to 42. Eight of the mothers have a Master's degree; five of them have a Bachelor's degree; and one of them graduated from a vocational school. Half of the mothers are housewives and full-time stay-at-home mothers. Most of the fathers have a Master's or higher degree, and their occupations are mostly related to computers or software engineering (e.g., software developer or

engineer). For those families in which both parents are working, the children usually go to an afterschool program or attend enrichment programs after regular school hours. These children can play with other children, work on their homework, or participate in sports or other peer-oriented structured extracurricular activities in these after-school programs. They usually stay there for a couple of hours until their parents pick them up after work.

Moreover, although English is used in some of the Chinese immigrant families, Chinese is still preferred by the parents when communicating with their children. As for their religious orientation, five of the mothers were Christians, three were Buddhists, and six did not have any religion.

Table 13  
*Background Information of the Chinese Immigrant Mothers*

Name	Age	Family Heritage	Language Used in the Home	Years of Stay in the US	# of Children	Target Child's Name	Child's Sex	Child's Age	Religion
Amy	41	Hong Kong	English, Cantonese	8	3	Ben	Male	8	Christian
Sherry	35	Taiwan	English, Mandarin Japanese	12	2	Terry	Male	7.5	Buddhist
Joan	42	Taiwan	English, Mandarin	20	2	Maggie	Female	7	None
Nicole	38	P. R. China	Mandarin	10	2	Gina	Female	6	Christian
Sylvia	42	Taiwan	Mandarin, English	29	2	Angie	Female	7	None
Winnie	42	P. R. China	Mandarin	10	2	Judy	Female	8	Christian
Peggy	35	P. R. China	Mandarin	8	1	Jean	Female	6.5	Christian
Teresa	41	Taiwan	Mandarin	15	2	Bruce	Male	8	Buddhist
Betty	42	Taiwan	Mandarin, English	16	2	Alex	Male	7	Buddhist
Cathy	--	P. R. China	Mandarin	12	2	Lisa	Female	6	Christian
Sandra	38	Taiwan	Mandarin	16	2	Andy	Male	7	None
Cindy	37	P. R. China	Mandarin, English	11	2	Anthony	Male	6	None
Debbie	42	Taiwan	Mandarin, Taiwanese	18	2	Tina	Female	6	None
Helen	40	Taiwan	Mandarin	19	2	Hebe	Female	6	None

Note: All the names, for both the mothers and the children, are pseudonyms.

### *Themes*

The qualitative analyses resulted in six themes, including: (a) broader definition of parental warmth; (b) guidance for peer problems; (c) encouragement of communication; (d) money and time issues in extracurricular activity participation; (e) parents as role models; and (f) generational differences and acculturation effects on childrearing. The summary of the Chinese immigrant mothers' responses in relation to the themes is shown in Table 14.

#### *Broader Definition of Parental Warmth*

Each of the 14 Chinese immigrant mothers provided detailed descriptions about their interactions and relationships with their children. All the mothers told me that they felt close to their children and believed that their children felt the same way. In response to the questions regarding the ways in which parental warmth is expressed in the family, most of the Chinese immigrant mothers, like the European American mothers, stated that they show their affection by hugging, kissing, and directly telling their children "I love you." However, many of the mothers also pointed out that they show their love and concern to their children by spending time with them and/or doing activities together (e.g., playing games, reading). Sylvia shared how she shows affection to her daughter:

I hug her every day when she comes home, and then ask her how she's doing or what she's done in school for the day. I feel that she loves for me to sit with her and watch TV together. So sometimes I sit there and watch TV with her. I also accompany her when she is doing her homework. She doesn't like it, but she can't refuse it. Well, each time when we study together, we end up falling into sleep.



(laugh)

In addition to spending time with children, daily childrearing responsibilities was also mentioned by several mothers as another way to express love and care toward their children. For these mothers, these daily responsibilities are not just work. Instead, they feel that they perform each chore with love and that their children are aware of it. As Cathy described, “We are very close to each other. For example, I prepare breakfast for her every morning, play games with her, and exercise together. We spend a lot of time doing these kinds of things.” Another mother, Amy, also said:

I think... OK, physically the mom always has to take care of them. Like... OK, get his stuff for him ready... I think he feels it when we take care of him, and, you know, we always spend time in the evening talking, and reading together, and playing together.

#### *Guidance for Peer Problems*

Several sub-themes emerged when exploring how parent-child communication influences Chinese American children’s development of social competence. All the Chinese immigrant mothers have conversations with their children every day, and most of them enjoy it very much. The most common topics between the mothers and children are what the children have learned at school and how the children are doing with their friends. When the mothers observed their children’s behavioral problems in social interactions or when they hear about children’s conflicts with peers, they usually discuss the incidents with their children. Many of the mothers stated that they children have learned different kinds of social skills through the conversations with them.

Five strategies were identified from the conversations between the Chinese immigrant mothers and their children:

*What to do next time (directions/suggestions).* When their children talked about the problems they encountered with their friends, most of the Chinese immigrant mothers provided direct suggestions for their children. Cindy, for instance, taught her son how to react next time he was not happy with his friends at school:

If something happened, I talk to him after he comes home. I usually ask how he feels first. There were times when he was not respected by other kids and felt hurt. I said, “Why didn’t you let him know? You should have told him and let him know.” For now I do not encourage him to fight back. (laugh) I encourage him to speak up. I said, “You could tell him firmly. If you tell him with a joking attitude, he will still feel it interesting to tease you. He will still treat you in the same way. If you do not feel comfortable, you should tell him with a very firm attitude, and tell him that his attitude is not right. If he doesn’t listen to you, and you feel that it’s a big deal, then go tell his mother or the teacher about his misbehavior.”

Another mother, Winnie, also discussed with her daughter what she can do to interact with her friends:

Sometimes she comes back and tells me, “Why did she do that? Why did she force me to do it? I can’t say no to her.” In this respect I think she feels dejected. When she has problems with other kids who are the only child or who are indulged by their parents, I usually tell her, “The reason why she said so is because she doesn’t know how to share with others. So just play with her if you

want to. If you feel uncomfortable playing with her, just don't do that." Then she said "Okay." Or sometimes she asks me, "What if she forces me to play with her?" I said, "If you want to play with her, you have to do so and don't say that she forces you. But if she makes you unhappy, you can say "I will play with you only after you apologize." She takes it very well.... Now they are good friends again. Kids are all like that.

*What not to do (reflections/empathy).* In addition to giving children advice when trying to help them deal with peer problems, many Chinese immigrant mothers also remind their children not to do the same thing to other children. Specifically, the mothers usually tell their children that their friends' behavior was not appropriate, and ask their children to avoid that kind of behavior in the future. Helen, for example, talked about how she taught her daughter how to deal with bully situations in school: "When she complains about other kids' misbehavior or bully situations, I usually tell her what she should do when interacting with those kids... I usually tell her, "First, don't get hurt. Second, don't be like that yourself."

The concept of empathy was also encouraged by some Chinese immigrant mothers when trying to help their children understand why certain behaviors were not appropriate. Nicole's daughter, Gina, used to bully other children when she was in kindergarten. Nicole helped her understand why this behavior was not right when she was bullied by another child in the same neighborhood:

In our neighborhood, there is another kid who is more aggressive...a girl...kind of bullied her. I told Gina, "Do you like her to treat you this way?" She said no.

Then I said, “If you don’t like her to treat you this way, can you treat other children in the same way?” That’s what I told her.

Another example was found in Teresa’s family:

There was one time that my friends’ kid left his [Nintendo] DS in my car. Bruce was happy about that. I told him that he couldn’t take this stuff because it was not his. I said “You can’t take it. If people lose their stuff, they will be very sad. Do you want your friend to be sad?” He said no. I told him that it’s not good to take other people’s stuff.

*Consequences of behavior (causal effects/reasoning).* Several mothers explained to their children why their behavior was not appropriate by telling them the possible consequence of the behavior. Joan, for instance, talked about what she thinks her daughter still needs to learn when she plays with her friends:

Like sharing or playing...playing games. She doesn’t like to lose. Sometimes I remind her that “If you always want to win, who will like to play with you?” Or “If you always want other people to follow your rules... other people may have their own rules as well. If you always ask others to follow your rules, they may not like to play with you. They would rather play with someone else.”

Another example was provided by Helen, who noticed that her daughter sometimes says bad words at home:

She knows that the words are not good. Sometimes she uses them purposely when she is quarreling with her brother. Sometimes she doesn’t know what these words mean. She just knows that people say that these are not good words. (laugh) She’d

like to test the boundary. But she doesn't do it when she is outside of home. I have told her that if she says these words, the teachers may not like her, and the classmates may not like her, either.

*Explanations for others' behavior.* Some Chinese immigrant mothers tried to comfort their children by finding possible reasons to explain why their friends treated them badly. This strategy was more often used for children who tend to be sensitive when interacting with friends. As Teresa stated, "He usually tells me what happened at school... Like so-and-so pushed him or things like that. Then we told him that the kid might not do it purposely. They are just kids after all."

Peggy also shared how she helped her daughter get over hard feelings about her friends:

She usually talks about what happened at school. For instance, she said she'd like to play with another kid. She walked to the kid and asked if she could play with her. That kid might be in a bad mood, so she said she did not want to play with anyone. Jean felt hurt and felt that the kid was mean. In this case, I told her that the kid did not want to play with *anyone* because she just happened to have a bad mood. It's not because she did not like you. You can go find other kids to play with. I explained to her this way. She is a little bit sensitive in this aspect.

*Repeated correction.* Many Chinese immigrant mothers mentioned that they need to repeatedly remind their children what they should or should not do to improve their social behaviors. These mothers believed that children are not able to change their behavior immediately after being corrected and that it is important to let children

understand why their behaviors are not acceptable. As Jessie stated, “At least you need to tell them. If you don’t let them know, they won’t think that it’s an important issue. So I still need to repeatedly remind them.” Teresa also shared: “[I told him that] you should say “hi” to people when you see them. I feel that he will probably get better [on this]. But in many cases you can’t ask a child to accept something right away. It takes time. But it’s still better than not telling them.”

### *Encouragement of Communication*

When discussing the daily conversations they have with their children, eight of the Chinese immigrant mothers noted that they tried to encourage their children to have conversations at home. Although these mothers did not directly mention how their SES may influence the way they communicate with their children, they and their husbands have comparatively higher education in the study. Specifically, among the eight Chinese immigrant families, seven of the fathers have a master’s degree or above and five of the mothers have a master’s degree. In terms of the ways that the mothers promote parent-child communications, I identified two strategies from the mothers’ discussion of when they usually talk to their children and what they talked about.

*Making it a habit.* Some Chinese immigrant mothers encouraged their children to talk to them by making it a routine. These mothers believed that if their children get used to talking with them every day, they are less likely to have secrets when they grow up. Debbie shared her viewpoint about conversation with children:

I sat with her when she was eating [snacks]. I asked her “How is school today?” and “What did you learn?” She said, “Oh! The teacher is blah, blah, blah.” Then

she talked a little bit more about it. I hope she can talk more, and to develop a habit to let me know what's going on at school...She talks much more now. At least she said things like so-and-so got sick today, or who read books with her today and they enjoyed it, or who liked the books she shared with the classmates. For us we may feel that these trivial things mean nothing, but for her it's the most interesting thing happened today.

Joan also shared that she talks to her child every day and enjoys this quality time: Every night before going to bed we "share our day" with each other. We talk about what made her happy or unhappy, and what made me happy or unhappy today. It has become a daily routine. So I can know what happened to her today, and if there's any big thing that made her happy or unhappy. In this way I am able to know what she is thinking even when she gets older.

*Improving speaking ability.* When having conversations with their children, several Chinese immigrant mothers noticed that their children are not good at organizing their thoughts or describing things efficiently. In order to enhance their speaking skills, these mothers ask their children to observe the environment carefully and to report what they see after they come home every day. Cindy, for example, talked about how she helped her son learn how to describe things more clearly:

Of course I love to talk to him. I encourage him to talk more. I let him talk when we are having meals....Sometimes I ask him what he learned today.

Or...sometimes he can't make his points clearly, so I should ask him this way:

"Tell me what you did first when you enter the classroom. Then? Then?" I usually

ask this way. After being asked this kind of questions several times, he describes things more orderly now, and I can understand what he said better.

Sandra also shared how she tried to facilitate her son's speaking skills:

I like to talk to him, but his replies are very limited. He is still not very good at describing things in detail. I feel that it needs some practice. So the reason I keep asking him is because I hope he can learn to observe what happened today or things like that. Yeah. Maybe I can use another method – before he goes to school, I probably need to let him know what I will ask him after he comes back home, and see if he will pay special attention to observe things.

#### *Money and Time Issues in Extracurricular Activity Participation*

Most of the Chinese immigrant mothers enrolled their children in different kinds of peer-oriented structured extracurricular activities. These activities included dance classes (e.g., ballet or Chinese folk dance), sports teams (e.g., soccer, tennis, or basketball), and tae kwon do. Half of the 14 Chinese immigrant mothers mentioned that with their current economic condition or as long as they can afford it, they provide their children with opportunities to participate in both unstructured (e.g., music classes) and peer-oriented structured extracurricular activities. As one mother stated:

I think in terms of opportunity available to the children. Because we can afford to send them for soccer, send them for stuff, I am like telling them, “Treasure what you have, because it's not everybody that can afford so many different kinds of activities.”

Although most of the mothers are willing to have their children participate in



peer-oriented structured extracurricular activities, in actuality, doing it is sometimes constrained. For example, several Chinese immigrant mothers who also have a job noted that they do not have time to drive their children from place to place, and sometimes they need to give up good activities. One example was provided by Sylvia:

They can learn whatever they want. But the problem is that sometimes there are constraints. Maybe that's because both of us are working, so we are very busy. So maybe we plan to take the dance class, but, you know [since I can't give the child a ride to the class], you can only pick whatever we can accommodate. I can't be like other stay-at-home mothers who can give their children rides to different classes from 3 to 7pm. Now we need car pools to let them go to the after school activities.

#### *Parents as Role Models*

Half of the Chinese immigrant mothers noted that they tried to be a good role model for their children. They believe that children learn both good and bad things from their parents. Therefore, it is important to demonstrate good behavior to children and avoid inappropriate behavior in front of them. Nicole, for instance, talked about how she set a good example for her child:

Another thing is that I try my best to be sociable. I try to demonstrate to her my consideration and care toward my friends. I hope she will learn from me at least later. Maybe she can't do it right now, but I hope...it's my goal.

Winnie also shared her experiences in helping her children to develop helping behaviors:

And also let her have a kind heart. When we go out and see homeless people on the street, I might stop three to four times out of ten. I won't stop each time. But if I take her with me, I will stop each time I see them...I will stop and give them either some food or coins, and let them know that we should help people if we can. In this way, people will help us when we need help in the future. I hope that they can notice other people's needs, and help these people if they can.

### *Generational Differences and Acculturation Effects on Childrearing*

*Generational differences.* Throughout the interviews, five of the Chinese immigrant mothers mentioned the generation gap between themselves and their parents in terms of the childrearing practices. Teresa described how she interacts with her children now:

Of course it can't be compared with the parent-child relationships in the past generations... I was more polite and respectful to my parents, and we rarely had physical contacts. But between me and my children we hug, kiss, and hold hands. We do some... more like interactions between friends. And we also chat. Yeah. We try to...we try to get along like the way we are with our friends. It's not like parents and children. Yeah...We establish a different kind of parent-child relationship.

Although generational differences were recognized by the Chinese immigrant mothers, many of them also stated that their parenting practices were somewhat influenced by the way they were raised. These mothers, however, did not think that their parents' childrearing strategies were necessarily good or appropriate for their children.

One example is provided by Joan, who is aware of this influence when she is raising her children:

I feel that we unconsciously replicate parenting strategies which were applied to us, because that's the only way we know how children are raised. So more or less...even if you don't like these kinds of strategies, you still use it unconsciously. Of course I try to adjust myself, but the influences are still there.

*Acculturation.* Eight of the Chinese immigrant mothers noticed that their parenting practices have adjusted to American culture. For example, these mothers use more verbal interaction and physical contact when expressing affection toward their children. They also encourage their children more often and offer choices to them rather than forcing them to follow the parents' directions. Moreover, many of the mothers mentioned that instead of being an authority figure in the family, they would like to learn to respect their children (e.g., change the way they talk to their children) and be a friend of theirs. Betty, for instance, talked about how her parenting strategies have changed after she immigrated to the United States:

The biggest difference I noticed after I came to the United States is that I see the mothers here respect their children very much. Even when they ask their children to do something, they always say "please." This influences me a lot. I feel that children raised in this way are more rational. So I hope that we can have equal relationships in my family. Usually when I talk to my children, I don't talk with a commanding tone. If I ask her to bring me something, I will say "Yu, *please* get it for me." So I adapt myself to the tones and attitudes American parents use to talk

to their children. For this aspect I like the American way.

In sum, the Chinese immigrant mothers are all concerned about their children's social development. They have tried to balance between their culture of origin and the American culture, and they feel that being a parent is not easy. Most of the mothers stated that they are still learning to become a good parent. Winnie, for example, shared how she felt about being a parent:

There are so many things that we should learn for parenting. I really hope...because the environment in which we grew up is quite different from what it is now, it's not suitable to raise our children in the way that our parents raised us. We should change ourselves from our generation and learn how to be a good parent....For one thing, the living environment is different [from the past]. Second, there is influence [American culture] from the outside. These are quite influential on children's development. So we really need to learn.

#### Summary of the Qualitative Findings

Figure 16 shows a summary of the key findings in relation to Chinese American children's social development. Four main themes have proximal influences on children's development of social competence:

(1) *Guidance for peer problems.* The Chinese immigrant mothers helped their children solve problems with peers by telling them the consequences of their behavior and what they should or should not do next time, explaining other children's behavior to comfort their children, and repeatedly correcting their children's misbehavior.

(2) *Encouragement of communication.* The Chinese immigrant mothers promoted

their children's conversations with them by *making it a habit* at home and *improving their speaking ability*.

(3) *Parents as role models*. The Chinese immigrant mothers demonstrated appropriate behaviors to their children to set a good model for them to follow.

(4) *Broader definition of parental warmth*. In addition to verbal and physical expressions, I identified two unique characteristics of Chinese immigrant mothers' definition of parental warmth: *taking on daily responsibilities* and *spending time with child*.

The first three themes (guidance for peer problems, encouragement of communication, and parents as role models) may directly promote children's social competence. Parental warmth, on the other hand, may facilitate children's social development by influencing the ways they communicate to and interact with their children.

Moreover, two main themes show their distal influences on Chinese American children's social competence:

(1) *Money and time issues in extracurricular activity participation*. Affordability and transportation were two main concerns for the Chinese immigrant mothers in terms of their children's engagement in extracurricular activities.

(2) *Generational differences and acculturation effects on childrearing*. The Chinese immigrant mothers' parenting practices (e.g., the ways the mothers interact with their children) were influenced by generational gaps (between the mothers and their parents) and acculturation.

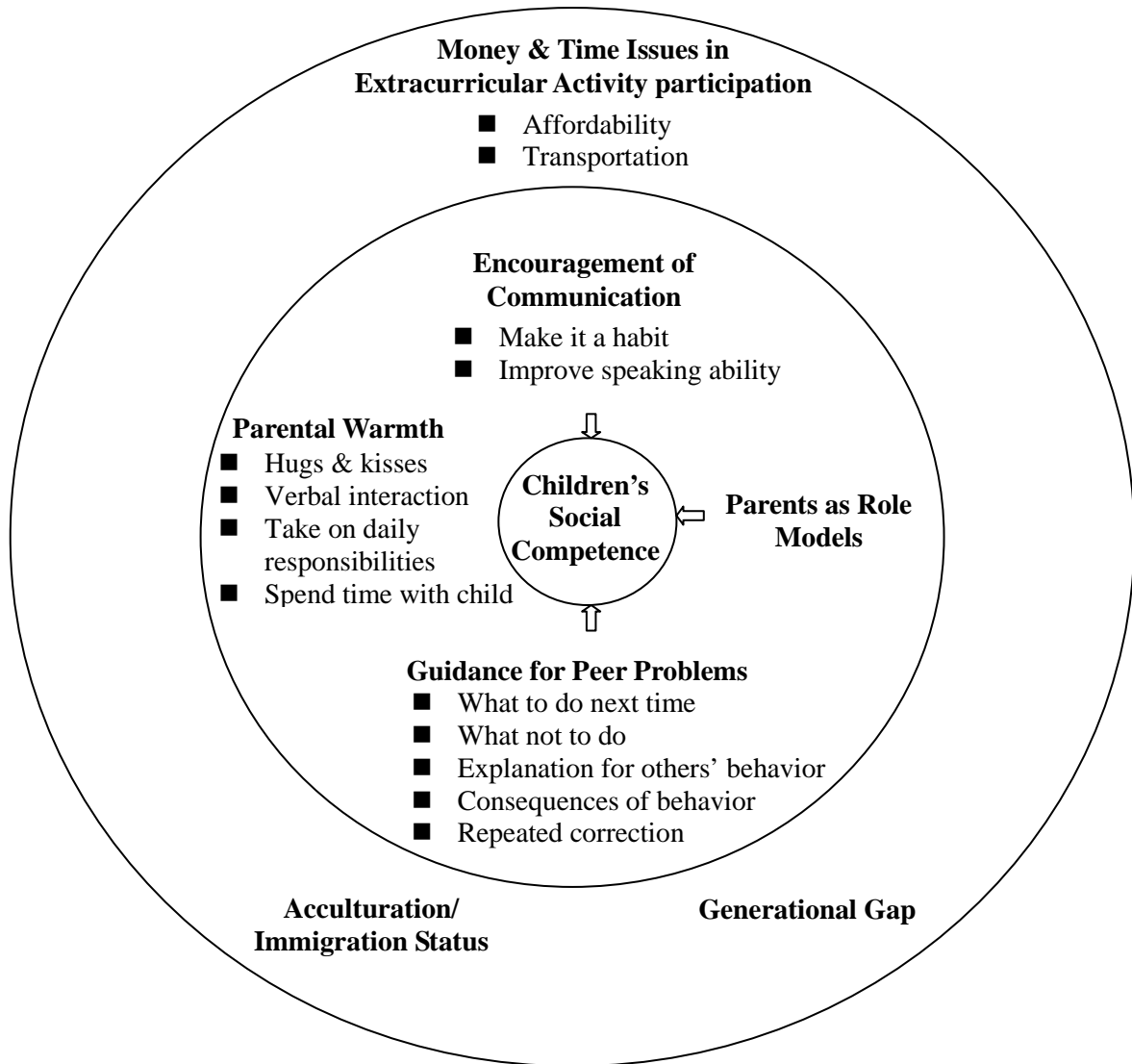


Figure 12: Graphical presentation of the qualitative findings

## Summary

This chapter presents the results of both the quantitative and qualitative investigations of Chinese American children's social development in their transition to elementary school. The results from the quantitative analysis showed that parental SES predicted the levels of parent-child communication in the Chinese immigrant subgroup, while it did not predict family conversations in the European American subgroup. The findings from the qualitative data further indicated that the parents with higher educational levels tended to encourage their children to have conversations with them. Specifically, they promoted parent-child communication by establishing a routine for conversation in the home or improving their children's abilities to express their ideas. According to the multiple-group analysis, parental SES also predicted children's participation in peer-oriented structured extracurricular activities for both cultural groups. The mothers interviewed noted that they planned to enroll their children in all kinds of extracurricular activities for as long as their financial condition would permit. Some mothers also revealed that their ability to provide rides for their children to activities was restricted by their employment status.

The results from the quantitative data showed that parent-child communication predicted the Chinese American children's social competence. The qualitative data further showed that the mothers tried to enhance their children's social competence by (1) teaching their children what they should and/or should not do in similar situations occurred in the future; (2) explaining the consequences of behavior so their children would understand why their misbehaviors are not appropriate; (3) giving possible reasons

for other children's behavior when their children feel hurt by their friends; and (4) repeatedly reminding their children not to make the same mistakes whenever the same misbehavior reoccurs. Children's engagement in peer-oriented structured extracurricular activities, on the other hand, did not predict children's social competence for either cultural group.

According to the multiple-group analysis, there was a cultural difference between the Chinese immigrant and European American subgroups in the expression of parental warmth. The results of the mothers' interviews indicated that, in addition to hugging and kissing and saying "I love you," the Chinese immigrant mothers showed their love to their children by taking on daily responsibilities (e.g., preparing food or getting things ready for them) and spend time on family activities together (e.g., playing, reading, or exercising). Moreover, the quantitative data showed that parental warmth predicted the levels of parent-child communication in the European American subgroup, while it did not in the Chinese immigrant subgroup. In addition, the results of the multiple group analysis indicated that parental warmth and parental SES were not associated with each other for both cultural groups. Parental warmth also failed to predict children's participation in peer-oriented structured extracurricular activities for either cultural group.

The final structural model in the Chinese immigrant subgroup suggested that years of stay in the U.S. positively predicted children's engagement in peer-oriented structured extracurricular activities, while it negatively predicted parent-child communication in the Chinese immigrant families. Years of stay in the U.S. was also positively correlated with parental SES. In addition, the qualitative data showed that the



Chinese immigrant mothers perceived it as important to be role models for their children. Several of the Chinese immigrant mothers also indicated that there were generational gaps in relation to childrearing practices between their parents and themselves. Many of the mothers noted that their parenting practices have adjusted to American culture. For instance, instead of forcing their children to obey parents' directions, the mothers tended to encourage their children more and to offer choices for them.

Table 14

*Summary of the Chinese Immigrant Mothers' Responses in Relation to the Themes*

Name	Broader Definition of Parental Warmth		Guidance for Peer Problems				
	Daily Responsibility	Spend Time Together	What to Do Next Time	What Not to Do	Consequences of Behavior	Explanations for Others' Behavior	Repeated Correction
Amy	X	X	X				
Sherry				X			X
Joan		X			X	X	
Nicole				X	X		
Sylvia		X	X				
Winnie	X	X	X			X	
Peggy	X		X	X		X	
Teresa			X	X		X	X
Betty			X	X	X		X
Cathy	X	X	X	X			
Sandra		X	X				
Cindy		X	X	X			X
Debbie	X		X	X	X		X
Helen		X	X	X	X		

Note: All the names, for both the mothers and the children, are pseudonyms.

Table 14 (Continue)

*Summary of the Chinese Immigrant Mothers' Responses in Relation to the Themes*

Name	Encouragement of Communication		Money and Time Issues in Extracurricular Activity Participation	Parents as Role Models	Generational Differences and Acculturation Effects on Childrearing	
	Making it A Habit	Improving Speaking Ability			Generational differences	Acculturation
Amy			X	X	X	
Sherry						X
Joan	X		X		X	X
Nicole				X		X
Sylvia			X			
Winnie				X		
Peggy	X					
Teresa	X		X		X	X
Betty	X		X	X	X	X
Cathy		X	X	X		
Sandra		X		X		X
Cindy		X	X			X
Debbie	X			X		X
Helen			X			

Note: All the names, for both the mothers and the children, are pseudonyms.

## CHAPTER FIVE

### DISCUSSION

The purpose of the study was to understand the developmental outcomes of Chinese American children's social development in their transition to elementary school. With both the quantitative and qualitative investigations, the results of this study illustrated a complex picture of these children's experiences in developing social competence. In Chinese immigrant families, parental SES influenced parent-child communication at home, which in turn promoted children's social competence. Parental SES, but not parental warmth, predicted children's participation in peer-oriented structured extracurricular activities. Activity participation, however, did not contribute to children's development of social competence. In this chapter, I will discuss the factors that influence Chinese American children's social competence. I will also describe the parenting strategies I observed in Chinese immigrant families, which are essential to the children's social development. Finally, I will discuss how the length of time the mothers have been living in the U.S. plays a role in the immigrant mothers' parenting practices, which are relevant to their children's development of social competence.

#### The Expression of Parental Warmth

The results of the multiple-group analysis showed that there was a cultural difference between European American and Chinese immigrant families in the ways parents show love toward their children. The qualitative investigation further indicated that Chinese immigrant mothers' love and concern toward their children, in addition to hugging and kissing, is expressed by taking on daily childrearing responsibilities (e.g.,

preparing food for the child) and spending quality time with their children (e.g., reading or taking exercises). These findings are consistent with Chao's (1995) studies suggesting that Chinese immigrant mothers define themselves as their children's caretakers and devote themselves to interactions with their children (e.g., playing, reading, or listening to the child) to maintain a close parent-child relationship.

The characteristics of the expression of parental warmth in Chinese immigrant families can be understood by the traditional Chinese cultural value that holds that good intentions are better exhibited through actions than words (Confucius 500 BC/1992). Strong emotions, from Confucius' point of view, should be discouraged since they may have a negative impact on individuals' health or relationships (Confucius 500 BC/1992). Therefore, Chinese immigrant parents tend to show love to their children in a reserved way even when they have a very close relationship with their children. For these mothers, providing instrumental support and being involved in children's everyday lives may become alternative ways to express love.

Although the way parents express love and concern toward their children was found to differ between European American and Chinese immigrant families, this study also showed that there was no cultural difference in the levels of warmth that parents show to their children. The parenting practices of training and *guan* in Chinese culture contain elements of parental concern, involvement, and firm control, which are correspondent to the authoritative parenting style (Chao, 1994; Tobin et al., 1989; Wu, 1985). The characteristics in training and *guan* (e.g., high involvement, direct teaching) in Chinese immigrant families, however, may influence Chinese American children's

perceptions of the levels of warmth they received from their parents. Research has shown that Asian American adolescents usually perceive a low level of parental warmth in the family (Uba, 1994). It is possible that there is a discrepancy between the Chinese immigrant parents' perceptions of the high levels of warmth and children's experienced parental warmth. This discrepancy may influence the parent-child relationships as well as the effects of parenting on the children's development and outcomes in Chinese immigrant families. Further investigation is needed to understand whether the discrepancy in the perceptions of parental warmth between parents and children is due to the ways of expressing parental warmth in the family.

#### Factors Influencing Parent-Child Communication

The quantitative data in this study suggested that parental SES positively predicted the level of parent-child communication in the Chinese immigrant families, whereas this effect was not observed in the European American families. Parental warmth, in contrast, predicted the level of parent-child communication in the European American families but did not influence parent-child communication in the Chinese immigrant families. As discussed earlier, previous research on parental SES and parent-child communication has focused on young children's language development, while studies on parental warmth and parent-child communication in early middle childhood are still rare. These findings provide new knowledge about how parental SES and warmth influence children's conversations with their parents in their early middle childhood and how these effects differ between European American and Chinese immigrant families.

In European American culture, direct and open conversations are essential for

effective communication between individuals (Hall, 1976; Oyserman et al., 2002). European American parents in general may adopt this communication style (Hall, 1976) and engage their children in abundant daily conversations in their families. The importance of parental warmth in the family then becomes apparent in European American families, for it increases children's willingness to disclose their thoughts and feelings (Laible & Thompson, 2007; Vygotsky, 1987). In Chinese culture, on the other hand, interpersonal verbal communication is comparatively more indirect and embedded in the social context (Gao et al., 1996; Hall, 1976). The idea of *hanxu*, which means to be implicit, explicates the reserved communication style in Chinese immigrant families. Moreover, in Chinese families, children are usually socialized to listen quietly to their parents during family conversations (Gao et al., 1996). Interrupting family conversations (especially between adults) is usually considered to be impolite and inappropriate (Gao et al., 1996). It is possible that the implicit ways of expressing parental warmth and the tendency for parents to lead the family conversations in Chinese immigrant families may lessen the influence of parental warmth on parent-child communication. In other words, if parents are not used to explicitly showing acceptance and expressing love (e.g., verbally and physically) toward their children and/or are prone to restricting their children's opportunities to express opinions during family conversations, the children may not feel comfortable with sharing their thoughts and feelings with their parents.

Nevertheless, according to the final structural model, parental SES positively predicted the level of parent-child communication in the Chinese immigrant families. The qualitative data further showed that the Chinese immigrant parents with higher

educational levels tended to encourage their children to have conversations at home. Specifically, these mothers promoted parent-child communication by improving their children's speaking abilities and making it a habit to let their children converse with them. These parenting practices reflect the concept of child training, characterized by direct teaching and high parental involvement, in Chinese culture and provide new insights into the strategies that Chinese immigrant mothers with higher SES use to promote parent-child communication. The findings also coincide with existing literature, suggesting that higher-SES parents tend to have more verbal conversations with their young children than lower-SES parents (Greenberg & Formanek, 1974; Hoff-Ginsberg, 1991). Parents with higher educational levels may have more knowledge about appropriate parenting strategies and value parent-child communication in the family. Since conversations between parents and children in Chinese immigrant families are characteristically reserved (Gao et al., 1996), it is particularly important for parents to encourage their children to express their thoughts and feelings. Parental educational level seems to be the critical determinant for greater parent-child communication in Chinese immigrant families.

#### Factors Influencing Children's Participation in Peer-Oriented Structured Extracurricular Activities

The results of the final structural models and multiple-group analysis showed that parental SES predicted children's engagement in peer-oriented structured extracurricular activities for both cultural groups. These findings coincide with the existing literature suggesting that children (kindergarteners and grade-school children) in higher-SES



families are more likely to participate in peer-oriented structured extracurricular activities than those in lower-SES families (O'Donnell & Stueve, 1983; Pettit et al., 1997). Further, the mothers' interviews showed that most of the Chinese immigrant mothers enrolled their children in peer-oriented structured extracurricular activities. Many of them believed that these activities were beneficial for their children's social development. Nonetheless, the mothers who were employed, or who believed the financial condition of their family was only "fair," also expressed concern about the affordability of these activities and their ability to provide transportation for their children. These findings support existing research, indicating that parents with higher SES are more likely to have greater resources and to be able to increase their investment in their children's development (Bradley & Corwyn, 2002; Kohn, 1963, 1995; Mayer, 1997). In sum, these qualitative findings broaden our understandings about how Chinese immigrant mothers perceive the importance of peer-oriented structured extracurricular activities for their school-aged children and the limitations they have in terms of their ability to support their children's activity participation.

Parental warmth, according to the final structural models and multiple group analysis, did not predict children's participation in peer-oriented structured extracurricular activities for either cultural group. Parents who prefer an authoritative parenting style, characterized by a high level of parental warmth, are usually supportive in terms of their children's learning and development (Baumrind, 1971). However, there has been a lack of research on the relationship between parental warmth and children's engagement in peer-oriented structured extracurricular activities. In fact, this relationship

should be examined under conditions in which parental SES is controlled for because a warm mother may not be able to enroll her children in peer-oriented structured extracurricular activities if her financial condition does not permit. Therefore, in terms of children's activity participation, the influence of parental SES may be greater than parental warmth.

#### Associations between Parental SES and Warmth

The quantitative analysis of this study showed that parental warmth was not associated with parental SES for either cultural group. This relationship was not discovered in the qualitative data either. Regardless of their SES, all the Chinese immigrant mothers in the qualitative part of the study showed great concern for their children and revealed that they have close relationships with them. These findings indicate that parents show love toward their children regardless of their educational level, household income, or occupation and that this parenting practice does not differ between European American and Chinese immigrant families.

Although studies on parental SES and parenting have indicated that parents in lower-SES families are more likely to be restrictive and to set constraints on their children than their high-SES counterparts (Kohn, 1977, 1979), such parenting practices are mostly for the purposes of safety and protection (Kelley et al., 1993). Moreover, the findings of this study contradict previous research suggesting that the stress caused by financial hardship in the family may adversely influence parents' parenting strategies and their relationships with their children (Conger & Conger, 2002). Although none of the families in my study were poor, some of them were concerned with their financial

conditions. It is possible that other factors such as parents' coping strategies (e.g., directly deal with the situation and seek social support; Sheppard, 2005) may buffer this negative effect on parent-child relationships in families with lower SES.

### Factors Influencing Children's Social Competence

#### *Parent-Child Communication and Children's Social Competence*

In accordance with the hypothesis, parent-child communication was found to predict both Chinese American and European American children's social competence in their transition to elementary school. This finding supports previous empirical studies of parental influences on children's social development which indicated that conversations between parents and children about social interactions and relationships promote the children's social competence (Applegate et al., 1992; Ladd et al., 1993; Russell & Finnie, 1990).

Although the influence of parent-child communication on children's social competence is the same for both the European American and Chinese immigrant families in the quantitative investigation, the qualitative data of this study broadens our understandings about the ways Chinese immigrant mothers facilitate their children's social development through daily verbal interactions. The results of the qualitative data showed that Chinese immigrant mothers help their children deal with peer problems by directly teaching them what they should or should not do if a similar situation happens in the future. These parenting strategies coincide with the idea of child "training," which means "teaching" or "educating," in Chinese culture. Through the process of training, Chinese immigrant mothers not only actively promote their children's academic

performance (Chao, 1994, 1996), but also teach them socially desirable and culturally accepted behaviors (Wu & Tseng, 1985).

Moreover, child training in Chinese immigrant families involves extensive conversations between parents and children. Thus, the teaching processes may appear to be verbose from the viewpoints of individuals in other cultural groups (Hulei et al., 2006). Interestingly, this cultural characteristic seems to contrast with Hall's (1976) ideas that individuals in American culture tend to use a communication style characterized by direct and open conversations, while individuals in Chinese culture tend to communicate less directly. In the qualitative part of this study, the Chinese immigrant mothers explained to their children why certain behaviors were not appropriate and repeatedly reminded them not to make the same mistakes again. This finding is in line with Zevenbergen and Hu's (2000) argument that Chinese immigrant parents engage in more conversations with their children when correcting their misbehavior. For Chinese immigrant mothers, it is crucial to let children understand why their misbehaviors are not acceptable in order to prevent repeated mistakes in the future (Hulei et al., 2006; Zevenbergen & Hu, 2000). Thus, intensive conversations between Chinese immigrant parents and their children are inevitable and necessary.

In addition, to help their children overcome negative feelings with their peers and to develop an open mind in terms of making friends, some of the Chinese immigrant mothers in the qualitative study provided their children with possible reasons or alternative explanations for other children's misbehavior. This finding suggests that in addition to directly teaching and giving advice when their children have peer problems,

Chinese immigrant mothers also help their children to think objectively in regard to their friendships to enhance their children's understandings of interpersonal relationships.

*Peer-Oriented Structured Extracurricular Activities and Children's Social Competence*

Participation in peer-oriented structured extracurricular activities, based on the results from the final structural models and multiple-group analysis, did not predict social competence for Chinese American or European American children. One possible reason may be that each kind of structured extracurricular activity offers a unique learning experience and makes unique contributions to the development of social competence (Fredricks & Eccles, 2008). For example, organized athletic activities may foster children's development of skills such as persistence, teamwork, and management of emotions (Danish, Taylor, & Fazio, 2003). Therefore, it may be more important to understand the specific qualities of each activity that facilitate children's social development than to investigate whether the total number of activities influences social development. Further investigation of the qualities or functions of peer-oriented structured extracurricular activities is needed to uncover their benefits in the development of children's social competence.

*The Effects of Years of Stay in the U.S.*

The results of the quantitative analysis showed that parental SES, parent-child communication, and children's engagement in peer-oriented structured extracurricular activities were influenced by the length of time the Chinese immigrant parents have immigrated in the States. Specifically, years of stay in the U.S. was positively correlated to parental SES. This suggests that the longer the Chinese immigrant parents live in the

United States, the better the living conditions (e.g., more household income or better occupation) and the higher the educational level they may obtain. Years of stay in the U.S. also positively predicted Chinese American children's participation in peer-oriented structured extracurricular activities. As the Chinese immigrant parents become well immersed in American culture, they will more likely enroll their children in peer-oriented structured extracurricular activities, as compared with academically-oriented after-school programs. This finding provides new evidence for the influence of the length of time the Chinese immigrant mothers have been living in the U.S. on their childrearing practices in regard to arranging their school-aged children's activity participation.

Despite the above findings, the results of the quantitative investigation showed that years of stay in the U.S. negatively predicted the level of parent-child communication in the home. This finding contrasts with the assumption that in the process of adjusting to the American culture, Chinese immigrant mothers will increase their daily conversations with their children. One possible explanation is that the challenges accompanied by immigration may initially require extensive parent-child communication. In other words, when Chinese immigrant mothers first move to the United States, they need to adjust their cultural values and parenting practices to the new cultural environment (Chiu, 1987; Lin & Fu, 1990). At the same time, they also need to spend a substantial amount of time communicating with their children to help them to be compliant with the social rules of American culture in addition to learning the traditional values of the Chinese culture (Hulei et al., 2006). In the first few years after immigration, Chinese immigrant mothers may need to constantly converse with their children to ensure

that their children do not have problems with peers and that they perform well at school. Moreover, previous studies have suggested that European American mothers tend to use concise comments for their children's misbehavior, while Chinese immigrant mothers tend to verbalize more extensively when discussing behavioral problems with their children (Zevenbergen & Hu, 2000). It is also possible that the longer the Chinese immigrant mothers live in the United States, the better they adapt to the U.S. culture and understand how to communicate effectively to help their children get along with peers in school. Consequently, these mothers may not need to communicate as extensively with their children as they did before. It would be interesting to further investigate whether the content of the parent-child communication or the way Chinese immigrant mothers communicate with their children when they are well adapted to the American culture.

#### Parents as Role Models for Children in Chinese Immigrant Families

The qualitative data also supports the premise that parents in the Chinese immigrant families place much importance on being role models for their children. This finding confirms the idea that "parents act as teachers" in Chinese-origin families (Chao, 1995; Huntsinger, Jose, & Larson, 1998). In Chinese culture, parents consider cultivating their children to become socialized individuals as their primary responsibility since children's outcomes are typically perceived as a reflection of the quality of "family education" (Chen & Luster, 2002; Ho, 1981). Parents are usually the ones to be blamed for not teaching their children appropriate behavior if their children misbehave outside of the home (Chen & Luster, 2002). Therefore, in the process of child training and *guan*, Chinese immigrant parents are not only highly involve in their children's academic

performance but also pay careful attention to their children's conduct.

Many of the mothers in this study were convinced that what they say and what they do are consistently observed by their children and that their children learn values and behaviors from them. Therefore, these mothers always remind themselves to demonstrate appropriate behaviors and lead their children by example. These findings support the social learning theory suggesting that children learn how to act appropriately in different social contexts and events through modeling more knowledgeable and experienced individuals (Bandura, 1977). Through the daily interactions with and observations of their parents, children learn how to interact with others and deal with problems in social relationships. These findings also coincide with an old Chinese saying: "Example is better than precept." For Chinese immigrant mothers, in addition to verbally teaching their children proper behaviors, it is very important to demonstrate appropriate behaviors to their children to promote their social development.

#### Limitations of the study

There are several limitations in this study. First of all, the quantitative part of this study is a secondary analysis of a longitudinal data set. Although analyzing a longitudinal data set enabled me to analyze data across time, using a pre-existing data set to some extent limits the explanatory scope of the findings. Moreover, the survey items in the ECLS-K data set were not distinctively designed to measure the parenting values and practices of Chinese immigrant mothers. In other words, the instruments used in the ECLS-K study were created by American researchers and were used to measure students' school performance and parents' parenting beliefs and practices across diverse cultural



groups. Therefore, these survey items may not be able to fully capture the cultural characteristics in the study variables for the Chinese immigrant families. Similarly, the theoretical framework used in this study was mainly developed by researchers in a Western culture (e.g., Ladd & Coleman, 1993; Ladd et al., 1999; Ladd et al., 1992; McHale et al., 2003; Parke et al., 1988; Parke et al., 1994; Parke et al., 1992). Their theoretical models may not adequately represent the entirety of Chinese American children's social development. Nevertheless, the qualitative exploration of this study provides information which cannot be obtained from standardized instruments and existing theoretical framework. The qualitative study enriches our understandings about the Chinese immigrant mothers' parenting beliefs and strategies regarding their children's social development.

The model fit of some of the measurement and structural models in this study did not meet the joint criteria suggested by Hu and Bentler (1999). However, these models were used to analyze the data because no other plausible modification was available to improve these models according to the LM tests/model modification indices and theory. Another limitation of this study is that the results derived from the multiple-group analysis were confounded by the factor of years of stay in the U.S.. When conducting multiple-group analyses, it is required that both groups have data on the variables included in the model. Consequently, the factor of years of stay in the U.S. could not be included in the model to examine cultural differences between European American and Chinese American children's social development. The results of the cultural comparisons may be different (though they may not necessarily be significantly different) if years of

stay in the U.S. can be controlled for in the Chinese immigrant subgroup.

In addition, the measures of parental warmth, parent-child communication, and children's social competence in this study were self-reports from the European American and Chinese immigrant mothers. It is possible that the responses on parenting practices and the mothers' perceptions of their children's social competence were influenced by social desirability. The ratings the mothers were providing for these measures could be greater than they actually were.

#### Recommendations for Future Research

I make three recommendations for future research on Chinese American children's social development. First, the results of this study showed that children's engagement in peer-oriented structured extracurricular activities did not predict children's social competence. The construct of peer-oriented structured extracurricular activities was assessed by the number of the types of such activities children were enrolled in during the kindergarten year. It is still unclear which characteristics of these activities promote the development of social competence in early middle childhood. Future researchers should continue to examine this research question to uncover the benefits of peer-oriented structured extracurricular activities for children's social development.

Although the interviews give us new knowledge about Chinese immigrant mothers' parenting practices and interactions with their children, the information obtained in this study was only from the mothers. Further studies are suggested to include Chinese American children's responses. With the data about the perceptions of parent-child interaction and social life from Chinese American children, researchers would be able to

obtain a deeper understanding of their social development.

In this study parental warmth did not predict either parent-child communication or children's participation in peer-oriented structured extracurricular activities in the Chinese immigrant families. However, the ways Chinese immigrant parents' express warmth seemed to be implicit and different from European American parents. Given the finding suggested by Uba (1994) that Chinese American adolescents tend to perceive lower levels of warmth in the family than European American adolescents, it is imperative for future researchers to investigate how parental warmth can be more effectively expressed in Chinese immigrant families.

Moreover, in the qualitative part of the study, I found that the mothers' responses to questions in relation to their parenting strategies and their interactions with children were largely influenced by their children's temperament. Future researchers can take this factor further into account to investigate how child temperament plays a role in children's social development in Chinese immigrant families.

### Conclusion

This dissertation study investigates the developmental outcomes of Chinese American children's social competence in their transition from kindergarten to elementary school. Previous research has suggested that parental SES, parental warmth, parent-child communication, and peer-oriented structured extracurricular activities promote children's development of social competence. These factors, however, have not been examined in an integrative way. Given the theoretical model suggested by various researchers (e.g., Ladd et al., 1999; Ladd et al., 1992; Parke et al., 1988; Parke et al.,

1994; Parke et al., 1992), I examined how these parenting variables are incorporated into and contribute to Chinese American children's social development. In this study, parental SES was found to influence both parent-child communication and children's participation in peer-oriented structured extracurricular activities in Chinese immigrant families.

Parental warmth, however, did not predict either of these variables. Parent-child communication, but not activity participation, was found to promote children's social competence. These findings support the theoretical model suggesting that parents facilitate children's social development by both directly giving advice to their children and indirectly providing an advantageous home environment for them.

The results of this study shed light on the importance of parental SES and parent-child communication in Chinese American children's development of social competence. Moreover, the ideas of child training and *guan* in Chinese culture play an essential role in the immigrant mothers' parenting beliefs and practices. This study suggests that Chinese immigrant mothers make the most out of the resources (e.g., money and human capital) they have and make great efforts (e.g., giving verbal guidance for peer problems and repeatedly correct children's misbehavior) to promote their children's social development. The influence of parental warmth on children's social competence, however, was not significant in the quantitative part of the study. In fact, Chinese immigrant mothers' love and concern toward their children was observed in their daily parent-child communication, as reflected in the qualitative data. It is possible that in Chinese immigrant families parental warmth is also expressed through daily parent-child communication about children's daily lives.

In sum, this study contributes new knowledge to the literature about parental socialization of Chinese American children's social competence. It enriches our understanding about 1) cultural differences in the effects of parental warmth and SES on parent-child communication between European American and Chinese immigrant families; 2) the importance of parental SES on parent-child communication and Chinese American children's engagement in peer-oriented structured extracurricular activities; and 3) the effect of years of stay in the U.S. on parent-child communication in Chinese immigrant families. However, it is important to note that the participants in the qualitative part of this study were recruited from two local Chinese Sunday schools which were affiliated with religious organizations. The qualitative data to some extent may not be representative to all the Chinese immigrant mothers living in the United States. Future researchers should be aware of this limitation when applying the findings of this study to their research.

The findings of this study will help school teachers and counselors understand the importance of parental SES and parent-child communication in Chinese American children's development of social competence. They will be able to more effectively assist Chinese American children who have peer problems, and give their parents useful and culturally sensitive suggestions to facilitate their children's social development. The findings of this study will also help Chinese immigrant mothers understand how their parenting beliefs and practices may influence their children's development and social competence, and help their children to adjust to the new school environment.

## Appendix A

### ECLS-K Kindergarten (Spring) Parent Interview Parental Warmth

Now, I'm going to read some statements. Please tell me whether each statement is completely true, mostly true, somewhat true, or not at all true.

Completely true 1	Mostly true 2	Somewhat true 3	Not at all true 4
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- a. (Child's name) and I often have warm, close times together.
- b. Most of the time I feel that (child's name) likes me and wants to be near me.
- c. Even when I'm in a bad mood, I show (child's name) a lot of love.
- d. I express affection by hugging, kissing and praising (child's name).
- e. (Child's name) does things that really bother me.
- f. I find myself giving up more of my life to meet (child's name)'s needs than I ever expected.
- g. I often feel angry with (child's name)
- h. (Child's name) seems harder to care for than most.

## Appendix B

### ECLS-K First Grade (Spring) Parent Interview Parent-Child Communication

Now I am going to read some statements. Please tell me whether each statement is never true for you, sometimes true for you, often true for you, or very often true for you.

Never 1	Sometimes 2	Often 3	Very Often 4
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- a. Even if I am really busy, I make time to listen to (child's name). Would you say it's never true, sometimes true, often true, or very often true?
- b. I discourage (child's name) from talking about (his/her) worries because it upsets (him/her).
- c. I encourage (child's name) to talk about (his/her) troubles.
- d. I encourage (child's name) to tell me about (his/her) friends and activities.
- e. I encourage (child's name) to express (his/her) opinions.
- f. When I lost my patience with (child's name)'s questions and demands, I just don't listen to (child's name) anymore.

## Appendix C

### ECLS-K Kindergarten (Spring) Parent Interview Peer-Oriented Structured Extracurricular Activities

Yes 1	No 2
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Outside of school hours, has (child's name) ever participate in

- a. Organized clubs or recreational programs, like scouts?
- b. Organized performing arts programs, such as children's choirs, dance programs, or theater performances?
- c. Organized athletic activities, like basketball, soccer, baseball, or gymnastics?



## Appendix D

### Results of Confirmatory Factor Analysis and Strong Invariance for Parental Warmth

The construct of parental warmth initially consisted of eight items: *warm*, *like*, *show*, *express*, *does*, *meetnd*, *feelan*, and *hard*. In order to ensure that each indicator was making a sufficient contribution to the measurement of parental warmth, the factor loadings which were not statistically significant and were lower than .35 were considered for removal from the construct. The indicators of parental warmth and their corresponding items are shown below:

#### *Indicators of Parental Warmth and the Corresponding Items*

Variable	Item
<i>Warm</i>	(Child's name) and I often have warm, close times together.
<i>Like</i>	Most of the time I feel that (child's name) likes me and wants to be near me.
<i>Show</i>	Even when I'm in a bad mood, I show (child's name) a lot of love.
<i>Express</i>	I express affection by hugging, kissing, and praising (child's name).
<i>Does</i>	(Child's name) does things that really bother me.
<i>Meetnd</i>	I find myself giving up more of my life to meet (child's name)'s needs than I ever expected.
<i>Feelan</i>	I often feel angry with (child's name)
<i>Hard</i>	(Child's name) seems harder to care for than most.

#### *CFA for the Chinese Immigrant Subgroup*

The results of the initial CFA analysis for the Chinese immigrant subgroup showed that the factor loadings of four indicators were both not statistically significant and lower than .35: *does*, *meetnd*, *feelan*, and *hard*. The fit indices of the initial model suggested a poor fit (CFI = .60, RMSEA = .15, SRMR = .10). Following the rule of keeping significant factor loadings with a standardized estimate of greater than .35, *meetnd*, *does*, *feelan*, and *hard* were removed from the model sequentially. The AIC and BIC decreased each time one of the indicators was deleted. The fit indices of model 5 (without *meetnd*, *does*, *feelan*, and *hard*) suggested a good fit of model (CFI = 1.00, RMSEA = .00, SRMR = .01). The remaining indicators of parental warmth in the Chinese immigrant subgroup were *warm*, *like*, *show*, and *express*. The factor loadings were all satisfactory (ranging from .42 to .85) and statistically significant.

*Fit Statistics for CFA of Parental Warmth for the Chinese Immigrant Subgroup (N = 114)*

Model	$\chi^2$	df	AIC	BIC	CFI	RMSEA	SRMR
Model 1: Initial CFA	56.72	20	1388.99	1447.89	.60	.15	.10
Model 2: CFA w/o <i>meetnd</i>	44.29	14	1111.52	1164.06	.62	.16	.10
Model 3: CFA w/o <i>meetnd</i> & <i>does</i>	15.94	9	959.42	1003.60	.87	.10	.07
Model 4: CFA w/o <i>meetnd</i> , <i>does</i> , & <i>feelan</i>	4.18	5	857.69	894.50	1.00	.00	.04
Model 5: CFA w/o <i>meetnd</i> , <i>does</i> , <i>feelan</i> , & <i>hard</i>	.20	2	691.71	721.16	1.00	.00	.01
Model 6: CFA w/ <i>warm</i> , <i>like</i> , & <i>show</i>	.00	0	520.63	542.72	1.00	.00	.00

*CFA for the European American Subgroup*

The initial CFA analysis for the European American subgroup showed that five indicators of parental warmth were not statistically significant: *warm*, *express*, *does*, *meetnd*, *feelan*, and *hard*. Among these five indicators, the factor loadings of *express* and *meetnd* were lower than .35 ( $\lambda = .07$  and  $.20$ , respectively). The fit indices of the initial model (Model 1), which included all eight items, indicated a poor fit (CFI = .23, RMSEA = .19, SRMR = .08). The indicator of *express* was removed first since the standardized estimate of its factor loading was the smallest among all the non-significant indicators ( $\lambda = .07$ ,  $p = .53$ ). Since the modified model was not nested in the initial model, the Akaike Information Criterion (AIC) (Akaike, 1974) and Bayesian Information Criterion (BIC) (Raftery, 1993) were used to evaluate whether the modified model was acceptable over the initial model. The model which had comparatively lower values of AIC and BIC was preferred. The results showed that the AIC and BIC values of the model without *express* were slightly lower than the initial CFA, indicating that the modified model (Model 2) be selected. However, the indicators of *meetnd*, *does*, and *feelan* of this modified model were still not significant. *Meetnd* was then removed because it was the only one with a factor loading lower than .35 ( $\lambda = .20$ ,  $p = .28$ ). The values of AIC and BIC were much reduced (from 2051.19 to 1567.80 and from 2116.03 to 1623.38, respectively). The indicators of *does* and *feelan* became significant and worked well after *meetnd* was deleted from the model. Except for SRMR, however, the fit indices (Model 3) indicated a poor fit (CFI = .43, RMSEA = .21, SRMR = .08). The remaining indicators of parental warmth for the European American subgroup were *warm*, *like*, *show*, *does*, and *feelan*. All the factor loadings of the indicators were statistically significant and were greater than .35 (ranging from .41 to .75).

*Fit Statistics for CFA of Parental Warmth for the European American Subgroup (N = 170)*

Model	$\chi^2$	df	AIC	BIC	CFI	RMSEA	SRMR
Model 1: Initial CFA	131.72	20	2115.12	2189.23	.23	.19	.08
Model 2: CFA w/o <i>express</i>	134.56	14	2051.19	2116.03	.09	.23	.08
Model 3: CFA w/o <i>express</i> & <i>meetnd</i>	71.27	9	1567.80	1623.38	.43	.21	.08
Model 4: CFA w/ <i>warm</i> , <i>like</i> , & <i>show</i>	.00	0	803.99	831.78	1.00	.00	.00

#### *Test of Strong Invariance*

In *Mplus*, the indicators of latent constructs should be identical between groups in a multiple-group analysis. The indicators which were shown in both cultural groups were selected to represent the construct of parental warmth. The final indicators of parental warmth were *warm*, *like*, and *show*. The fit indices suggested that the three indicators worked well in both cultural groups (CFI = 1.00, RMSEA = .00, SRMR = .00 for both groups). This measurement model fitted perfectly because it is a just identified model. Strong invariance analysis was conducted directly restricting the intercept and the factor loading of each indicator of a latent variable to be the same between groups. Thus, in the constrained model, both the factor loading and intercept of each measured variable were set to be equal between the two groups. The LM test was utilized to evaluate whether the constraints were reasonable.

The goodness-of-fit indices of the constrained model did not indicate a good fit (CFI = .52, RMSEA = .21, SRMR = .20). The LM tests/model modification indices suggested that the intercept of *show* should be freely estimated in both groups. This indicated that only the metric invariance of parental warmth was supported. Thus, the intercept of *show* was released to be estimated separately for both groups. Consequently, the factor loading of it should also be freely estimated, although the LM tests/modification indices did not suggest any modification. After releasing the intercept and factor loading of *show*, the fit indices were much improved (CFI = 1.00, RMSEA = .00, SRMR = .14). However, the value of SRMR was slightly higher than the suggested cutoff of .10. This was the model used in subsequent analyses.

*Fit Statistics for CFA of Parental Warmth for the European American (N = 170) and Chinese Immigrant (N = 114) Subgroups*

Model	$\chi^2$	df	p	CFI	RMSEA	SRMR
Constrained Model	30.95	5	--	.52	.21	.20
Released Model	2.10	3	<.01	1.00	.00	.14

## Appendix E

### Results of Confirmatory Factor Analysis and Strong Invariance for Parent-Child Communication

Parent-Child Communication initially included six items: *listen*, *worry*, *trouble*, *friend*, *opinion*, and *patient*. The CFA analysis started with examining the significance of the factor loadings to ensure that each indicator contributed significantly to the construct of parent-child communication. Specifically, the paths which were not statistically significant and lower than .35 were considered for deletion from the construct. The indicators of parent-child communication and their corresponding items are shown below:

#### *Indicators of Parent-Child Communication and the Corresponding Items*

Variable	Item
<i>Listen</i>	Even if I am really busy, I make time to listen to (child's name).
<i>Worry</i>	I discourage (child's name) from talking about (his/her) worries because it upsets (him/her).
<i>Trouble</i>	I encourage (child's name) to talk about (his/her) troubles.
<i>Friend</i>	I encourage (child's name) to tell me about (his/her) friends and activities.
<i>Opinion</i>	I encourage (child's name) to express (his/her) opinions.
<i>Patient</i>	When I lost my patience with (child's name)'s questions and demands, I just don't listen to (child's name) anymore.

#### *CFA for the European American Subgroup*

The initial CFA analysis showed that all the indicators of this construct were statistically significant, although the standardized estimates of *worry* and *patient* were lower than .35 ( $\lambda = .20$  and  $.31$ , respectively). Nevertheless, the goodness-of-fit indices indicated a good fit (CFI = .95, RMSEA = .07, SRMR = .04). The indicators of *worry* and *patient* were removed from the data sequentially. Since the initial and modified models were not hierarchical models, the AIC and BIC were used to evaluate whether the modified models were plausible. The values of AIC and BIC decreased moderately each time one of the indicators was dropped. The final indicators of parent-child communication for the European American subgroup were *listen*, *trouble*, *friend*, and *opinion*. The fit indices suggested that the model was supported by the data (CFI = .97, RMSEA = .09, SRMR = .03). Although the value of RMSEA was greater than the suggested value of .06, its 90% confidence interval ranged from 0 to .20, which included the .05 value. All the indicators were statistically significant, and the factor loadings were satisfactory (ranging from .48 to .88).

*Fit Statistics for CFA of Parent-Child Communication for the European American Subgroup (N = 170)*

Model	$\chi^2$	df	AIC	BIC	CFI	RMSEA	SRMR
Model 1: Initial CFA	15.25	9	1493.50	1549.52	.95	.07	.04
Model 2: CFA w/o <i>worry</i>	7.12	5	1232.86	1279.54	.98	.05	.03
Model 3: CFA w/o <i>worry</i> & <i>patient</i>	4.93	2	939.83	977.17	.97	.09	.03

*CFA for the Chinese Immigrant Subgroup*

The results of the initial CFA analysis for the Chinese immigrant subgroup indicated that this model had a good fit of data (CFI = .96, RMSEA = .07, SRMR = .07). However, the indicators of *worry* and *patient* were not statistically significant. These two items were then removed from the model one at a time, and the new fit indices of each modified model were examined. The AIC and BIC were utilized to evaluate the competing, non-hierarchically related models. The values of AIC and BIC decreased each time one of the indicators was dropped from the model. The fit indices of Model 3 (without *worry* and *patient*) suggested a good fit of data (CFI = 1.00, RMSEA = .00, SRMR = .01). The final indicators of parent-child communication for the Chinese immigrant subgroup included *listen*, *trouble*, *friend*, and *opinion*, and their factor loadings were all statistically significant and acceptable (ranging from .36 to .66).

*Fit Statistics for CFA of Parent-Child Communication for the Chinese Immigrant Subgroup (N = 114)*

Model	$\chi^2$	df	AIC	BIC	CFI	RMSEA	SRMR
Model 1: Initial CFA	13.21	9	1272.34	1319.59	.96	.07	.07
Model 2: CFA w/o <i>worry</i>	11.27	5	994.01	1033.38	.94	.11	.07
Model 3: CFA w/o <i>worry</i> & <i>patient</i>	.16	2	795.00	826.50	1.00	.00	.01

*Test of Construct Invariance*

The measured variables which were significant in both the European American and Chinese immigrant subgroups were used to indicate the construct of parent-child communication. The indicators of parent-child communication included *listen*, *trouble*, *friend*, and *opinion*. The test of metric invariance analysis was first conducted. The initial unconstrained model (Model 1) fit the data well.

The model (Model 2) with factor loadings constrained to be equal in each group, however, was not supported by the data (CFI = .91, RMSEA = .10, SRMR = .30). The model modification indices suggested that the factor loading of *trouble* should be freely estimated in both cultural groups. This indicated that the metric invariance was not

supported. The indicator of *trouble*, therefore, was removed from the analysis. In Model 3, the factor loadings of the indicators were set to be freely estimated. The values of AIC and BIC decreased moderately (from 1720.95 to 1303.44 and from 1796.28 to 1360.83, respectively). The fit indices of model 3 indicated a good fit except for RMSEA, which was greater than the suggested value of .06 (CFI = .97, RMSEA = .12, SRMR = .04).

To examine the strong invariance of parent-child communication, the three-item factor loading and intercept constrained model (Model 4) was then compared with Model 3. The fit indices of the constrained model indicated an acceptable fit of model except for the SRMR (CFI = .97, RMSEA = .07, SRMR = .19,  $p = .34$ ). Nevertheless, no suggestions regarding the indicators were found in the model modification indices, indicating that the strong invariance of parent-child communication was supported. The final items of parent-child communication consisted of *listen*, *friend*, and *opinion*. The three items were then summed and used as a measured variable to measure the construct of parent-child communication.

*Fit Statistics for CFA of Parent-Child Communication for the European American (N = 170) and Chinese Immigrant (N = 114) Subgroups*

Model	$\chi^2$	df	p	AIC	BIC	CFI	RMSEA	SRMR
Model 1: Initial Model	11.97	7	--	1720.95	1796.28	.97	.07	.05
Model 2: Constrained	26.81	11	< .01	1728.75	1789.73	.91	.10	.30
Model	$\chi^2$	df	p	AIC	BIC	CFI	RMSEA	SRMR
Model 3: Three Items	5.54	2	--	1303.44	1360.83	.97	.12	.04
Model 4: Three Items Constrained	7.92	5	.34	1301.74	1348.38	.97	.07	.19

## Appendix F

### Interview Questions

#### **About the Family**

1. Can you tell me a little about your family? How old are you?
2. Do you have a job and if so, what is your job? Does your husband have a job, and if so, what is his job? What is your and your husband's education level?
3. When did your family come to the States? Why did you immigrate to the States?
4. Can you tell me a little about your children? How old are they? Which grade are they studying?
5. What does your family usually do together? (Probes: Do you go on family outings, or have special family activities? Do you have meals together? What do you do on weekends or when you have some time together?)
6. If your child does something that you do not want him/her to do, what do you usually do? Can you give me an example of such a time? What did he/she do or say and then what did you do or say?
7. What language(s) do you use in your family?

#### **[Focus on the targeted child]**

7. Can you describe your child for me? What kind of person do you think he/she is (e.g., in terms of personality)? (Probes: Can you choose 5 words that best describe your child?)
8. Can you describe what your child usually does on a typical day? On weekends?

#### **Social Development**

1. Does your child have friends? If no, does he/she spend time with other children? From where does your child know them? How often do they meet and interact? What do they do when they see each other? Can you tell me about a time when you saw them interacting together? Describe what happened and what your thoughts were as you watched your child with his/her friend?
2. What do you think are your child's strengths when interacting with other children? Have you done anything to help your child develop these strengths? What do you think are things he/she is still learning in terms of how to be with children of his/her age? Are there ways that you try to teach or explain those things to your child? Can you give me an example of a conversation or something you did or said to your child to help him/her with social interactions?
3. Is there anything else that you have done to help your child establish good relationships with others? Can you give me an example?

### **Parent-Child Interactions**

1. How is your relationship with your child? Do you feel close to him/her?
  - a. How do you show your child that you care about him/her?
  - b. How often do you show your child that you care about him/her?
  - c. Do you think your child learns anything in your interactions with him/her?  
What is it?
2. How often do you talk with your child? What kind of topics do you usually talk about? Can you give me an example of a recent conversation you and your child had?
  - a. Do you enjoy talking with your child? Does your child enjoy talking or discussing things with you?
  - b. Has your child ever told you about his/her friends or classmates? What happened?
  - c. Do you think your child learns anything when you talk about things together? If so, what things do you believe he/she learns from your conversations?
  - d. Do you think your child will come to you if he/she encounters problems with friends or other people? If so, can you give me an example of when your child did this?
  - e. Do you think your communications with your child have an influence on him or her? In what way?

### **Peer-Oriented Structured Extracurricular Activities**

1. Do you enroll your child in any peer-oriented structured extracurricular activities? (explain definition)
  - a. What are they? Why do you want to enroll him/her in these activities?
  - b. How often does he/she participate in the activity?
2. Is there anything else that you would like to talk about regarding your child's experiences in participating in peer-oriented structured extracurricular activities?

### **SES**

1. How would you rate the SES in your household, with a scale ranging from 1 to 10? (1 indicates the lowest and 10 indicates the highest)
2. Do you think your SES has an influence on your child's development? In which way?

### **Culture & Acculturation**

1. Have you ever seen European American mothers say or do something with their children, especially with regard to education or discipline, that struck you as different from what you would do or say to a child in your culture? Can you give me an example?



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